## EXHIBIT E

IN THE SUPERIOR COURT OF THE STATE OF ARIZONA

IN AND FOR THE COUNTY OF PINAL

THE STATE OF ARIZONA,	)
Plaintiff,	)
Vs.	) No. CR201103026 ) Appeal No.
FERNANDO SEGOVIANO ALMANZA,	) 2 CA-CR 2014-0034
Defendant.	) )

Florence, Arizona October 3, 2013 8:34 a.m.

BEFORE: THE HONORABLE BOYD T. JOHNSON, JUDGE

REPORTER'S TRANSCRIPT OF PROCEEDINGS

JURY TRIAL - DAY 4

Prepared for Appeal by: MICHELLE L. WELLNER, CR, RPR Certified Court Reporter #50742



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A P P E A R A N C E S On Behalf of the State: MR. MATTHEW LONG MR. THOMAS KOHLER Deputy County Attorneys Pinal County, Arizona On Behalf of the Defendant: MR. PAUL GREEN Attorney at Law 

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- 1 (The following proceedings were had outside
- 2 the presence and hearing of the jury.)
- 3 THE COURT: Have the record show the
- 4 presence of the attorneys, the defendant, Mr. Almanza.
- 5 Jury is not here yet.
- And this is the time I like to start each
- 7 morning so we can talk before the jury gets here. The one
- 8 issue I think we ended -- talked about briefly at the end
- 9 of the day was the playing of the recording of the
- 10 forensic interview of Ada. Mr. Long wanted to play it,
- 11 the defense objected. I already made a record and said it
- 12 could be played.
- Mr. Long, have you decided what your timing
- 14 is? You want to play that first?
- MR. LONG: Yes, sir. That was going to be
- 16 our request, is that we start with playing the video and
- 17 then get into witnesses.
- 18 THE COURT: Okay. And you told me that
- 19 that's, what, like 45 minutes or so?
- MR. LONG: I believe it's less than that.
- 21 There are small sections of silence.
- THE COURT: The whole purpose is to have
- 23 them hear it and see it in context, so I assume you want
- 24 to run it in full and not skip over anything.
- MR. LONG: I think that would make sense

- 1 just so there's no question in the jurors' minds that
- 2 nothing is left out.
- 3 THE COURT: And your argument is, it's in
- 4 response to an implication that there might have been
- 5 coaching?
- 6 MR. LONG: Yes, sir.
- 7 THE COURT: Jury has been informed on how
- 8 possibly to determine whether coaching has occurred, and
- 9 that's the argument you want to make, does that sound
- 10 correct?
- MR. LONG: Yes.
- 12 THE COURT: Okay. Mr. Green, Mr. Long was
- 13 directed to and did provide what would amount to a limited
- 14 instruction on the use of this particular recording. Did
- 15 you have a chance to look at that.
- 16 MR. GREEN: I did, your Honor.
- 17 THE COURT: Okay. The request for
- 18 limited -- limiting instruction would, of course, be a
- 19 defense request, not necessarily a prosecution request.
- 20 First, you want me to give a limiting
- 21 instruction?
- 22 MR. GREEN: I do request that you do that,
- 23 yes, sir.
- 24 THE COURT: And second, is there anything to
- 25 the wording of the proposed instruction that you would

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object to?
1
                 MR. GREEN: No, your Honor.
2
                 THE COURT: Okay. Even though you object to
3
   playing it at all, and we have a record of that?
4
                             Absolutely.
5
                 MR. GREEN:
                 THE COURT: The instruction that I've been
6
   presented is sufficient, correct?
7
                 MR. GREEN: Your Honor, it's as sufficient
8
   as I can think of that we can come up. It is not very
9
10
   limiting, but it would be impossible to --
11
                 THE COURT: To improve on it?
                 MR. GREEN:
                             To improve on it, yes.
12
                  THE COURT: Okay. Now, question to both of
13
   you, should I read -- and it may be more appropriate --
14
   let me back up. I forget the exhibit, is it 126?
15
                 MR. LONG:
                             119.
16
                  THE COURT: 119?
17
18
                 MR. LONG: Yes.
                  THE COURT: Okay. It might be appropriate
19
   for me to simply say that the State has requested over the
20
   objection of defendant that they be allowed to play
21
   Exhibit 119. Prior to them playing that, I would like to
22
   instruct you as follows, and simply do this. Do you have
23
   any problem with doing it that way, Mr. Long?
24
                  MR. LONG: No, your Honor.
25
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1
                  THE COURT: Mr. Green?
 2
                  MR. GREEN:
                             No, your Honor.
 3
                  THE COURT: Well, we'll start off that way.
 4
   Depending on how long it actually takes, we either take
   the morning break immediately after that, or we'll start
 5
   with the witness. We don't want to take a break too
 6
 7
   early.
8
                  Adding in that and thinking in the length of
9
   the witnesses you do have today, Mr. Long, do you suspect
10
   we'll be done -- still think we'll be done by noon?
11
                 MR. LONG: I do.
12
                  THE COURT: Okay. And you have no others
13
   that can go on today, our next step would be the one we're
```

MR. LONG: Yes, Judge.

waiting for on Monday?

14

- 16 THE COURT: So when we're done today, I need
- 17 to talk to the jury about that, correct?
- MR. LONG: Yes, sir.
- THE COURT: Do you feel the same way?
- MR. GREEN: Yes, your Honor.
- 21 THE COURT: You obviously don't want to
- 22 start any presentation in the middle of or towards the end
- 23 of the State's presentation, right?
- MR. GREEN: No, I do not, your Honor.
- THE COURT: And I can, because of the

- 1 discretion obviously given a judge, let you do that out of
- 2 order if you wanted to, but you simply don't want to.
- MR. GREEN: Your Honor, I prefer that the
- 4 State complete their case before I put on mine.
- 5 THE COURT: Fair enough. Not a problem.
- 6 That's fair enough. My only problem is going to be
- 7 explaining to the jury. And I think what I'll say is the
- 8 attorneys and I, when we discussed the length of each
- 9 witnesses' testimony, length of trial, calculated it to be
- 10 such and such. Turns out it went a little quicker than we
- 11 thought it would, but we do have a witness that can't be
- 12 here until Monday, so we're going to have to recess today
- 13 and start again on Monday morning.
- Any problem with me wording it that way, Mr.
- 15 Long?
- MR. LONG: No, sir.
- THE COURT: Mr. Green?
- MR. GREEN: No, your Honor.
- 19 THE COURT: Okay. Good. Anything else we
- 20 need to cover before we start?
- MR. LONG: Just the video is 30 minutes 32
- 22 seconds, I think I saw. That's with -- that's in total,
- 23 the silence and everything. It's a little less than I
- 24 originally thought.
- THE COURT: Good.

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1 MR. LONG: Did I print out enough
```

- 2 transcripts for the -- to hand out to the jurors that they
- 3 could follow along during the video? I have them. I
- 4 don't know what the court's view is of that, including
- 5 that with the video.
- Quite candidly, I am torn as to whether or
- 7 not that's effective for my purposes because I want them
- 8 to see her as well. And sometimes with the transcript,
- 9 they are not watching the video.
- 10 THE COURT: Are you asking to give that to
- 11 the jury?
- MR. LONG: I guess I would like to ask what
- 13 the court's inclination would be.
- 14 THE COURT: Okay. Let's say even though you
- 15 didn't, you asked me and he objected to it, I'm not going
- 16 to let you do it, and I'll tell you why. The whole
- 17 purpose of running it is so the jury can see this
- 18 interview au naturale with no help. They can simply make
- 19 their own interpretation of the pattern of the interview.
- 20 So if it were requested, it'll be denied, but you're
- 21 obviously withdrawing the request.
- MR. LONG: Yes, sir.
- THE COURT: There you go.
- 24 Anything else, Mr. Long?
- MR. LONG: No, Judge.

```
THE COURT: Mr. Green?
1
2
                  MR. GREEN: Nothing, your Honor.
                  And you stated my objection very well.
3
4
   Thank you.
5
                  THE COURT: Au naturale.
6
                  MR. LONG: If I could supplement the record,
   the contents of the speech are still relevant because it
7
   relates to developmentally appropriate language.
8
   quess that would be the only argument I had for why the
9
   actual words and understanding of the words would be not
10
   only relevant, but potentially critical.
11
12
                  THE COURT: Yes. And I don't disagree with
   the words themselves, but it's the presentation and manner
13
   or presentation based on your own witness' testimony, and
14
   it is important to the jury's review and interpretation of
15
   the presentation. So if you're making the request, again,
16
   it will be denied, but you are not, so we had a very nice
17
18
   scholarly discussion.
19
                  Anything else?
20
                  MR. LONG: No, sir.
21
                  THE COURT:
                             Sir?
22
                  MR. GREEN:
                             No, your Honor.
23
                  THE COURT:
                             Okay. Guys, relax.
                                                   The jury
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25 (A short recess was taken.)

won't be here until 9 o'clock.

24

- 1 THE COURT: Show that the attorneys are
- 2 present. Defendant, Mr. Almanza, is hear. The jury is
- 3 not hear. They came in briefly and was sent back out.
- 4 Todd was told to make sure everybody was
- 5 ready. He says he was told they were. Was there a
- 6 miscommunication?
- 7 MR. GREEN: Yes, your Honor.
- 8 THE COURT: We obviously want to avoid it,
- 9 so if you're not ready, just tell him you're not ready.
- 10 We're not going to bring the jury in until everybody is
- 11 ready.
- 12 MR. GREEN: I understand, your Honor.
- 13 THE COURT: Okay. Bring them in.
- 14 (The following proceedings were had in the
- 15 presence and hearing of the jury.)
- 16 THE COURT: Have the record show the
- 17 presence of the attorneys, defendant, Mr. Almanza. The
- 18 jury is now back in the courtroom after the evening
- 19 recess.
- 20 And good morning, ladies and gentlemen.
- 21 Please get comfortable. A couple of things I want to talk
- 22 to you about real quickly. First, maybe it's good news or
- 23 bad news, when we do voir dire, the jury selection, we
- 24 talk about the length of the trial. It's based upon my
- 25 conversations with the attorneys and just trying to guess

- 1 in general how long each witness will take and how much
- 2 time will be used up, which is why in voir dire we talked
- 3 about going all this week and into Monday of next week.
- 4 It would appear when we finish today that we will end up
- 5 recessing until Monday rather than come in to court
- 6 Friday. So during the break, it might give some of you a
- 7 chance to make other arrangements. Either you can get a
- 8 day's worth of work in, or you can have an extra day off
- 9 for a three-day weekend. We do have to wait until Monday
- 10 rather than go tomorrow, on Friday. We are waiting for a
- 11 witness who is not available until Monday, so we have
- 12 to -- we have to take that break, okay.
- The other thing, we're going to begin today
- 14 with the State playing, at their request over the
- 15 objection of the defendant and me allowing, Exhibit 1-1-9,
- 16 119. I have an instruction as to that particular exhibit.
- 17 You are about to watch and listen to the
- 18 forensic interview of Ada Wilhelmi. This evidence is
- 19 admitted so that the jury can view the questions asked,
- 20 responses given, and view the victim's demeanor during the
- 21 interview in order to evaluate whether there is evidence
- 22 that the victim's responses were influenced by either the
- 23 interviewer or outside sources. You must consider it only
- 24 for that limited purpose and not for any other purpose.
- Okay. If you would, please.

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And I should ask for the record, Mr. Long,
1
2
   is the State ready to proceed?
                 MR. LONG: Yes. State is ready to proceed.
3
                 THE COURT: And are you, sir?
4
                 MR. GREEN: Yes, sir, I am.
5
                 THE COURT: Okay. Thank you.
6
                 Is that volume level satisfactory to
7
   everybody, or should we turn it down a little bit?
   Everything is okay. Down just a tiny bit for some of the
   jurors? Just a little bit.
10
                  (Exhibit No. 119 played for the jury.)
11
                 THE COURT: Mr. Long, are you ready to call
12
   your next witness? Or Mr. Kohler?
13
                 MR. KOHLER: Yes, your Honor. The State
14
   calls Nikki Petrin at this time.
15
                 THE COURT: All right. If you would,
16
17
   please, ma'am, come all the way forward, please.
18
                 THE WITNESS: Thank you.
19
                 THE COURT: And right over here to get you
20
   sworn in.
                 THE WITNESS: Thank you.
21
22
                 (The witness was sworn.)
23
                 THE COURT: Okay. Ma'am, come on over and
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24

have a seat.

- 1 NIKOME PETRIN,
- 2 called as a witness herein, having been first duly sworn,
- 3 was examined and testified as follows:
- 4 DIRECT EXAMINATION
- 5 BY MR. KOHLER:
- 6 Q. Good morning, Ms. Petrin. Could you please state
- 7 your name for the record?
- 8 THE COURT: Again, use the mic as much as
- 9 you can.
- 10 MR. KOHLER: I will, your Honor.
- 11 BY MR. KOHLER:
- 12 Q. Good morning, Ms. Petrin. Can you state your
- 13 name for the record for us?
- A. My name is Nikome Petrin, and I go by Nikki.
- 15 Q. Could you go ahead and spell your full name for
- 16 the stenographer?
- 17 A. Yes. Nikome, N-I-K-O-M-E, Petrin, P-E-T-R-I-N.
- 18 Q. Ms. Petrin, could you please tell us what it is
- 19 that you do for a living?
- 20 A. I work for the Department of Public Safety Crime
- 21 Lab, the Central Regional Crime Lab. And I work in the --
- 22 currently I'm in the toxicology unit, but when this
- 23 testing was done, I was in the DNA and serology unit
- 24 performing serological testing.
- Q. What is serology?

- 1 A. Serology is basically looking for biological
- 2 fluids on items of evidence, so what I'm looking for is
- 3 blood, semen, saliva, urine, or feces.
- Q. Okay. We're going to talk a little bit more
- 5 about that, but before we talk about that, could you tell
- 6 us what kind of training and experience you went through
- 7 in order to become a Department of Public Safety
- 8 criminalist?
- 9 A. I have a B.S. in biochemistry, as well as a year
- 10 of research in order to get my degree. And then once I
- 11 was hired with the Department of Public Safety, I went
- 12 through training specific to the work that I was doing.
- 13 So I did about six months' training for serology, looking
- 14 for different bodily fluids and the different tests that
- 15 are involved with that.
- 16 Q. Now, in the field of serology, what are the
- 17 bodily fluids that you can look for?
- 18 A. Blood, semen, saliva, urine, and feces.
- 19 O. And are there -- are there tests that are
- 20 generally accepted in a scientific community in order to
- 21 find these fluids?
- 22 A. Yes.
- 23 O. Is it the same test for each one?
- 24 A. No, they are all different.
- 25 Q. I'm sorry. Each one of those fluids has a

- 1 different test?
- 2 A. That's correct. There's -- each body fluid has
- 3 its own specific test, and in some cases there are more
- 4 than one test that's acceptable for testing for those body
- 5 fluids.
- 6 Q. Now, the Department of Public Safety, are the
- 7 tests that you perform the same tests that are performed
- 8 in other laboratories across the United States?
- 9 A. Yes. I can only speak for a couple of the labs.
- 10 I know that general practice we do work under the FBI
- 11 guidance, and we do use the tests that they suggest. And
- 12 like I said for the different body fluids, there's --
- 13 there's a number of different tests that are accepted and
- 14 we're definitely in that umbrella of the tests that are
- 15 acceptable.
- 16 Q. Now, you mentioned that some of the things you
- 17 test for are semen, and you also mentioned spermatozoa; is
- 18 that correct?
- 19 A. No. I test for semen. You can't have
- 20 spermatozoa without there being semen, but you can have
- 21 semen and not have spermatozoa present.
- Q. And you mentioned one of the tests you do is test
- 23 for blood?
- 24 A. Correct.
- Q. Now, are there any protocols that the Department

- 1 of Public Safety Serology Unit -- is that the correct
- 2 unit?
- 3 A. Correct.
- 4 Q. The Department of Public Safety Serology Unit
- 5 follows when they receive a -- an evidence sample
- 6 regarding sexual assault?
- 7 A. Yes. There is a -- there is a protocol written
- 8 for sex assault, yes.
- 9 Q. And I use the word protocol maybe prematurely.
- 10 Can you tell us what a protocol is?
- 11 A. Protocol is basically a guideline that everybody
- 12 from the unit will follow so there's basic guidelines in
- 13 there. It describes the different tests that we can use
- 14 to identify the body fluids. It describes what items of
- 15 evidence are required for us to look at, and it just makes
- 16 sure that we're all following the same basic guideline for
- 17 treating the sex assault kit -- for testing the sex
- 18 assault kits, to make sure we're all on the same page and
- 19 every case gets treated the same.
- 20 Q. Now, specifically when receiving a sex assault
- 21 kit, are there any requirements that are specific about
- 22 the testing for semen?
- 23 A. Yes. When we receive a sex assault kit, there is
- 24 also portions of the sex assault kit that we are required
- 25 to test for the presence of semen. And it further states

- 1 that if something was collected in a sex assault kit with
- 2 the intent to look for semen, we're required to look at it
- 3 for semen.
- 4 Q. Now, are there any specific protocols regarding
- 5 testing evidence for the presence of blood?
- 6 A. In a sex assault kit or testing for blood?
- 7 Q. In a sex assault kit specifically.
- 8 A. It's not -- no. It's analyst discretion and
- 9 storage driven. That's why when we receive a sex assault
- 10 kit, we also get the same nurse's notes, so the person who
- 11 collected the sex assault kit will give us notes, and that
- 12 gives us a basic guideline. Because as a serologist, what
- 13 I want to do is to make sure that I'm collecting the
- 14 correct evidence that can give the information that
- 15 follows along with a sex assault kit.
- So if, you know, I'm looking at the sex
- 17 assault kit and the same nurse collects everything
- 18 possible, if I don't need to look at all of that stuff,
- 19 there's only a portion of it that follows the story line,
- 20 all I'm doing as a scientist is looking at the story line
- 21 and see if the evidence follows the story line.
- 22 Q. Now, did you receive a sex assault kit involving
- 23 a person by the name of Ada Wilhelmi?
- 24 A. Yes.
- 25 Q. And when you received that sex assault kit, what

- 1 form did it come in?
- THE WITNESS: Your Honor, may I refer to my
- 3 notes to my refresh my memory?
- THE COURT: He's going to have to qualify
- 5 you.
- Go ahead, Mr. Kohler. On the notes.
- 7 BY MR. KOHLER:
- 8 O. I'm going to go ahead and show you an exhibit.
- 9 I'm showing you what's been marked as State's Exhibit 129.
- 10 Do you recognize that?
- 11 A. I do.
- 12 Q. And what are you looking at there?
- 13 A. These are my notes, not the full report, but this
- 14 is my notes that I took and included to generate my
- 15 report.
- 16 Q. I'm going to show you two other exhibits as well.
- 17 Perhaps one other exhibit. Sorry. It was just one other
- 18 exhibit.
- 19 Could you tell us what those two pages are?
- 20 This is Exhibit No. 108.
- 21 A. This is my report that I generated that matches
- 22 the notes that I took.
- Q. Will looking at those refresh your recollection
- 24 as to information regarding a test you conducted on
- 25 evidence involving a person by the name of Ada Wilhelmi?

- 1 A. Yes.
- 2 Q. Go ahead and glance over that.
- 3 A. Okay.
- 4 Q. Now, I believe I asked you what condition was
- 5 the -- was the kit in when you received it; is that
- 6 correct?
- 7 A. Yes.
- 8 Q. Can you answer that question now?
- 9 A. Yes, sir. I received a cardboard box that was
- 10 sealed that contained a brown paper bag that actually
- 11 contained the sex assault kit.
- 12 Q. And when you say the sex assault kit, what was
- 13 contained in that sex assault kit?
- 14 A. The sex assault kit actually included a number of
- 15 five white envelopes, one white paper bag, and paperwork.
- 16 Q. Now, did you test some of the items in that kit
- 17 for the presence of semen?
- 18 A. I did.
- 19 Q. And why did you do that?
- 20 A. Again, referring back to our protocol, when we
- 21 receive a sex assault kit, there are portions of it that
- 22 we are required to test for semen. Again, the protocol is
- 23 just making sure that we treat every case the same. And
- 24 in this case, the portions that I am required to test are
- 25 the anal swabs, the external genital swabs, and those are

- 1 actually the only ones that I am required to test that I
- 2 received in this case.
- Q. And were you able to conduct tests on those
- 4 items.
- 5 A. I was.
- 6 Q. And when conducting those tests, did you follow
- 7 the protocols required when testing for the presence of
- 8 sperm?
- 9 A. I did.
- 10 Q. And the test that you use, are those tests that
- 11 are generally accepted into the scientific community?
- 12 A. They are.
- 13 Q. And what were the results of those tests?
- 14 A. I did not find any -- my test for semen was
- 15 negative, and then I did a further step to test for -- to
- 16 look for the presence of spermatozoa, and that was
- 17 negative also.
- 18 Q. And that further step, is that also a step that's
- 19 generally accepted in the scientific community?
- 20 A. Yes, it is.
- 21 Q. Now, did you conduct any further tests on any
- 22 items that you received in this kit?
- 23 A. Several of them I just collected and retained in
- 24 our laboratory frozen storage. As a serologist, what I'm
- 25 looking for is stuff that has the potential to go on for

- 1 further DNA testing. And in this case, based on nurse's
- 2 notes as well as what was collected in the kit, there are
- 3 some portions of it that I just collected and put into our
- 4 laboratory frozen storage and didn't test any -- perform
- 5 any tests on because I wanted to make sure that I gave the
- 6 DNA analysis as much sample as I could. And if I tested
- 7 it, I would have consumed a portion of it. And I wanted
- 8 to make sure that I gave them as much as I could.
- 9 Q. Now, those are items that you didn't test; is
- 10 that correct?
- 11 A. Correct.
- 12 Q. Was there anything that you actually did conduct
- 13 further testing on?
- 14 A. I did. The underwear in this case.
- 15 O. Now, when you tested the underwear, did you do
- 16 any -- any examination on it for the presence of semen?
- 17 A. Yes.
- 18 Q. What examination was that?
- 19 A. When you're looking at an item that's bigger than
- 20 a swab, what I'm looking for, we use what's called an
- 21 alternate light source. And basically what it is is a
- 22 blue light in a dark room that in the presence of a
- 23 portion of this semen and actually a couple or body fluids
- 24 like saliva will fluoresce and vaginal secretions will
- 25 fluoresce.

- 1 And what I'm looking for is just instead of
- 2 -- I'm taking a bigger item and narrowing down the areas
- 3 that I want to test to make sure that I am looking in the
- 4 right area. So I performed the alternate light source
- 5 search and found areas on the underwear that could be a
- 6 potential interest for looking for semen.
- 7 Q. What did you do with those areas of potential
- 8 interest?
- 9 A. I tested them with my -- I'm looking for semen.
- 10 It's a -- two colorless chemicals that in the presence of
- 11 semen turns a really nice bright purple color. And I
- 12 performed that test. That actually came back negative, so
- 13 I stopped my search at that point.
- Q. Did you make any markings on the underwear?
- 15 A. I believe I did. I didn't write down that I made
- 16 markings, but generally because what I'm doing is taking a
- 17 larger item and in a dark room looking at the areas that
- 18 fluoresced are not something that would generally show up
- 19 in the light. So when I mark on the underwear, what I'm
- 20 doing is reminding myself when I go back to the light to
- 21 see those two colorless chemicals, I'm just making sure
- 22 that I know which areas that I need to test.
- Q. Did you examine the underwear for any other
- 24 fluids?
- 25 A. I did. I noted that there were red/brown stains,

- 1 that's the RBS in the front part of the crotch. And then
- 2 I noted that there were approximately four stains, and
- 3 they were of varying sizes. And I tested just a small
- 4 portion of that to see if I considered -- if I thought
- 5 that it was positive for the presence of blood.
- 6 Q. And did you make any -- any markings on the
- 7 underwear in association with your test for blood?
- 8 A. I don't recall off the top of my head.
- 9 Generally, if it's blood stains and I can see them or
- 10 they're red/brown stains and I can see them and I've
- 11 tested them, generally -- generally the only reason I
- 12 would mark on it if it was something like that fluorescent
- 13 area where I wouldn't see it without my special -- my
- 14 alternate light source, I wouldn't mark on it. I may have
- 15 in this case, but generally, me noting the sizes of those
- 16 stains and the area that those stains are in the
- 17 underwear, that's enough for the DNA person to say, this
- 18 is where -- it's not hard for them to find.
- 19 Q. Now, did you conduct any further -- you mentioned
- 20 you conducted tests on those small -- a small -- that you
- 21 conducted a test on a small portion of one of those
- 22 stains?
- 23 A. Uh-huh.
- Q. What was the testing process or test that you
- 25 used?

- 1 A. It's called the Kastle-Meyer test. And basically
- 2 it's for the presence of blood. It's the same -- same
- 3 thought of two colorless chemicals that in the presence of
- 4 blood will turn a hot pink color.
- 5 And then I -- for the presence blood, I
- 6 actually look at it under the microscope also. Blood has
- 7 unusual characteristics under the microscope. What I look
- 8 for is a shiny red -- kind of like a candy apple color
- 9 with crackly finish. And I marked that both of those
- 10 tests came back positive. So that gives me a good
- 11 indication when both of those come back positive that
- 12 there is blood present.
- Q. So there were two tests that you conducted?
- 14 A. Correct. The chemical, as well as the visual
- 15 test, and those two together are what lead me to the
- 16 conclusion that that's blood.
- 17 Q. I am going to show you another exhibit now. I'm
- 18 going to show you what's been marked as State's -- I'm
- 19 sorry. Marked as Exhibit 126B.
- 20 Do you recognize the exterior of that?
- 21 A. I do.
- Q. And could you tell us what it is?
- 23 A. This is what I would have marked item number
- 24 1860-2.12.
- 25 Q. And what do those numbers correspond to?

- 1 A. That is, the sex assault is item number 1860-2,
- 2 and we have standardized sex assault kits, so the .12 is
- 3 underwear.
- 4 Q. So based on the outside of that packaging, what
- 5 can you determine that is inside that packaging?
- 6 A. The stain that is also marked with an X mark that
- 7 these are underpants.
- 8 Q. Okay. And is that the package that you received
- 9 in Ada Wilhelmi's case?
- 10 A. It is because I actually have the DR number, the
- 11 item number including the .12, the date that I looked at
- 12 it, as well as my initials.
- Q. You said throughout DR number there, what is a DR
- 14 number?
- 15 A. I'm sorry. The case number. Every time an item
- 16 comes into DPS, it's given a unique identifier for DPS.
- 17 The agency has their own number that they associate it
- 18 with, and we use the two items in combination, as well as
- 19 the specific item numbers to give a unique identifier to
- 20 each item that we look at in a case.
- 21 Q. I'm going to go ahead and have you put those
- 22 gloves on, if you don't mind.
- And while you're doing that, when you
- 24 received that item, was it in -- was there any -- anything
- 25 inappropriate about the condition in which you received

- 1 it?
- 2 A. No.
- 3 Q. If there had been, would you have made notes
- 4 about that?
- 5 A. I would. And actually what my notes say is that
- 6 I received one white paper bag, red evidence tape sealed,
- 7 which this is the red evidence tape, and so there were
- 8 also initials and date overlapping right onto the package.
- 9 And that tells me that it's a proper tape seal. And then
- 10 marked with label one, which this is, this Ada -- Wilhelmi
- 11 comma Ada label.
- 12 MR. KOHLER: If I could have a second, your
- 13 Honor.
- 14 THE COURT: Go ahead, sir.
- 15 MR. KOHLER: Sorry, your Honor.
- 16 BY MR. KOHLER:
- 17 Q. Could you go ahead and pull those out of that
- 18 bag?
- 19 Can you tell us what you're looking at
- 20 there?
- 21 A. It appears to be a girl's children's size
- 22 underwear, which I marked in my notes as one pair of
- 23 underwear, purple with white butterflies all over,
- 24 tagless, marked Faded Glory, 6.
- Q. And is that the pair of underwear that you

- 1 received to test in Ada Wilhelmi's case?
- 2 A. It is because I also have the same information
- 3 that I placed on the outside of the bag on the inside of
- 4 the underwear.
- 5 Q. And did you affix that information there?
- 6 A. I did.
- 7 Q. Okay. Now, is this the underwear -- is this the
- 8 underwear that you just told us had blood in it?
- 9 A. That's correct.
- 10 Q. And could you go ahead and look at the blood
- 11 stained inside that underwear?
- Now, as part of your work as a serologist,
- 13 do you know anything about the -- if blood stains fade
- 14 over time?
- 15 A. Definitely. I read articles about blood stains.
- 16 Generally when I talk about what my findings are, I can
- 17 only tell you whether the chemical and the visual test
- 18 came back positive. I can't tell you when this stain got
- 19 there. I can't tell you whether it's been washed because
- 20 different materials will -- will absorb blood stains in
- 21 different ways. There's a whole bunch that goes into it.
- 22 I can only tell you whether my tests came back positive.
- Q. I'm going to show you another exhibit now.
- These are not the photos I would like you to
- 25 look at.

- 1 A. I was going to say, I didn't recognize those.
- 2 Q. Okay. I'm showing you what's been marked as
- 3 State's Exhibit 87.
- 4 A. Okay.
- 5 Q. Could you tell us what we're looking at there?
- 6 A. It looks like the exterior of the underwear that
- 7 I analyzed.
- 8 Q. Okay. I'm sorry. I'm going to have you turn the
- 9 underwear that you're looking at from our previous exhibit
- 10 back right side out.
- 11 Is there -- is there a difference between
- 12 the -- those two stains?
- 13 A. Which two stains?
- 14 Q. I'm sorry. Do you see any stains on the exterior
- 15 of the underwear that you're looking at in your hand now?
- 16 A. Yes.
- 17 Q. Okay. And does that stain look similar to the
- 18 stain shown in Exhibit 87 on the screen?
- 19 A. Yes.
- 20 Q. Is there any -- any difference in those two -- in
- 21 those two stains?
- 22 A. Without a scale, I can't tell you. They do look
- 23 to be similar. They do look -- it looks as if I have it
- 24 folded the same way, and it looks to be the same stain.
- Q. I'm going to show you what's been marked as

- 1 State's Exhibit No. 4. And if you could turn the
- 2 underwear inside out now.
- 3 MR. LONG: Which exhibit?
- THE COURT: You might more easily see it on
- 5 the screen behind you.
- THE WITNESS: Yes.
- 7 BY MR. KOHLER:
- 8 Q. I'm sorry. I may have misstated.
- 9 I'm showing you what's marked as Exhibit No.
- 10 92. And we're seeing a scale in there. Is that helpful
- 11 to you at all in determining distinctions?
- 12 A. Actually my initials on it actually helps with
- 13 distinguishing also, but, yes, those are the stains that I
- 14 tested.
- 15 O. Could you show us on Exhibit 92 where those
- 16 initials are so we can see those?
- 17 A. It is my initial right here. There is kind of
- 18 like a crinkled-up case number, as well as the item number
- 19 and the .12, as well as the date that I looked at it.
- Q. And there in Exhibit 92, also are there any other
- 21 lines that you can see?
- 22 A. Yes. This is where I would have marked the ALS
- 23 positive areas.
- Q. I'm sorry. ALS positive?
- 25 A. That's the alternate light source where I said if

- 1 I was in the dark room, I would have marked it so that
- 2 when I brought it into the light, you can kind of see on
- 3 this picture that there is not a big difference in how
- 4 this area looks as opposed to this area.
- 5 When I mark it for -- with the alternate
- 6 light source that's what I'm doing, is I'm making sure
- 7 that when I step out of the dark room with my blue light
- 8 and I'm in full light like this for our laboratory, it
- 9 reminds me where I found those areas that kind of had that
- 10 fluorescent color. This is where I would have circled it
- 11 for the red/brown stains that I located.
- 12 Q. Now, looking at State's Exhibit No. 92 and
- 13 comparing it with the actual underwear you have there, do
- 14 note any fading of the red blood stain in the actual
- 15 underwear from when this picture was taken?
- 16 A. I did say in my notes that they were just
- 17 red/brown stains, and I see the same red/brown stains
- 18 right here and here that I would have noted.
- 19 Q. Now, go ahead and have a seat. Thank you.
- You can perhaps put the underwear back in
- 21 that evidence envelope.
- Ms. Petrin, you mentioned that there were
- 23 protocols requiring certain -- certain tests for semen?
- 24 A. Correct.
- Q. And that there weren't any such protocols

- 1 requiring tests for blood?
- 2 A. It's not that they are not required. It's that
- 3 our protocol is a general guideline for testing every sex
- 4 assault kit the same, so there are portions that are
- 5 acquired for us in sex assault kits that the same nurse is
- 6 collecting items for the intent that there could
- 7 potentially be semen present, and so that's what our
- 8 protocol looks for. For blood, the presence of blood in
- 9 sex assault kits, there isn't a guideline. It would be
- 10 story driven why I would test for the presence of blood in
- 11 a sex assault case.
- 12 Q. And just to be clear, when you say story driven,
- 13 what does that mean?
- A. We receive the same nurse's notes, so whoever
- 15 collected the sex assault kit. And by saying it's the
- 16 sexual assault nurse examiner, and they collect a series
- 17 of notes by asking the person who the kit is collected
- 18 from a series of questions.
- 19 And what I'm looking for in those notes is
- 20 parts of the story, like what type of assault potentially
- 21 occurred, where am I actually looking for the presence --
- 22 there to be the best possibility for the presence of
- 23 semen, what are they collecting for the presence of maybe
- 24 some other body fluid, or some other type of cellular
- 25 material, so I can make sure -- like I said earlier, I

- 1 just retain laboratory frozen storage portions of the sex
- 2 assault kit that weren't collected for the intent of
- 3 looking for semen. It was for the intent of possibly some
- 4 other type of cellular material being present. And I want
- 5 to leave those as whole as I can for the DNA analyst just
- 6 in case there isn't a lot there.
- 7 Q. Now, Ms. Petrin, when you receive a sex assault
- 8 kit from -- where there's an adult woman as the victim, do
- 9 you typically review the undergarments for the presence of
- 10 blood?
- 11 A. I would not consider it abnormal to find the
- 12 presence of blood on underwear in a woman that could
- 13 potentially be menstruating. It's explainable why there
- 14 is -- there could be the presence of blood on those
- 15 underwear. And I can't tell you when the blood got there.
- 16 I can't tell you how the blood got there. I can only tell
- 17 you whether it's there or not. And there are reasonable
- 18 explanations why a menstruating woman would have blood in
- 19 her underwear.
- Q. Was there something about the underwear in Ada's
- 21 case that made you treat it different than that?
- 22 A. Upon review of the nurse's notes, it indicated
- 23 that she was a young girl, approximately six years of age.
- 24 And I tested for the presence of blood because it would
- 25 have to be explained why there was blood there, what

- 1 type -- some -- something at some point in time would have
- 2 allowed for there to be blood there, if that was indeed
- 3 blood, and it did --
- 4 Q. I'm sorry?
- 5 A. I'm sorry. And I was going to say it did come
- 6 back positive for blood, so I mean, there's -- there's
- 7 reasons that blood can be there, it's just less
- 8 explainable on a six-year-old than, say, on a 20-year-old.
- 9 Q. Unless there was something that was bleeding,
- 10 right?
- 11 A. Correct.
- MR. KOHLER: No further questions, your
- 13 Honor.
- 14 THE COURT: All right, sir.
- Mr. Green?
- 16 CROSS-EXAMINATION
- 17 BY MR. GREEN:
- 18 Q. Again, you said that you are not able to tell
- 19 when these stains were created; is that correct?
- 20 A. That's correct.
- Q. Okay. And in your testing, for any of the
- 22 objects that you tested, you found no semen; correct?
- A. That's correct.
- Q. And you found no spermatozoa?
- 25 A. That's correct.

- 1 Q. Separate test, different test; correct?
- 2 A. They are separate tests on the same items, yes.
- 3 Q. Okay. None was found?
- 4 A. Correct.
- 5 Q. You found blood on the underwear?
- 6 A. That's correct.
- 7 Q. And again, you don't know what caused that blood
- 8 to be on the underwear; correct?
- 9 A. That's correct.
- 10 Q. Did you test the blood for type?
- 11 A. No.
- 12 Q. Is that something you normally do?
- 13 A. No. The Kastle-Meyer test that we do for blood
- 14 is a very basic color test, and it only -- blood from
- 15 anything reacts the same way.
- 16 Q. If requested, would you be the person who tested
- 17 blood for type?
- 18 A. No.
- 19 Q. Who would that be?
- 20 A. That would be the person who actually performed
- 21 DNA on this case.
- Q. Okay. So that's not in your purview to deal with
- 23 the type of the blood, that's the DNA person?
- A. That's correct.
- Q. Okay. Is it unusual to find blood in children's

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1 underwear?
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- 2 A. I wouldn't -- I don't know. I can only tell you
- 3 about this case right now. I don't remember the -- I can
- 4 think of situations that there would be blood in the case.
- 5 That would be for the -- the nurse to talk about what type
- 6 of trauma looked like was there that could potentially
- 7 have caused the blood in this case. I have found blood in
- 8 other cases.
- 9 MR. GREEN: Thank you. That's all the
- 10 questions I have.
- 11 THE COURT: All right, sir.
- Mr. Kohler, any redirect?
- MR. KOHLER: No, your Honor.
- 14 THE COURT: Okay. Mr. Kohler, may this
- 15 witness be excused?
- MR. KOHLER: Yes, your Honor.
- THE COURT: Mr. Green?
- MR. GREEN: Yes, your Honor.
- 19 THE COURT: Okay. Thank you very much,
- 20 ma'am. You're excused.
- I will tell you, the Rule was invoked, so
- 22 please don't talk to any other witness about the case.
- THE WITNESS: Yes, sir.
- THE COURT: Thank you.
- 25 (Witness excused.)

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1 THE COURT: Why don't we take the morning
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- 2 break, and we'll get your next witness. I'm guessing it's
- 3 not a 15-minute witness? No.
- 4 MR. LONG: It's close, but that's fine.
- 5 THE COURT: What's that?
- 6 MR. LONG: I said, it's close, but I'm not
- 7 indifferent as to when the court -- -
- 8 THE COURT: I'm not indifferent to it.
- 9 Let's take a short break. We'll start again in about
- 10 20 minutes. Be back in the jury assembly room about
- 11 10:30. We'll get you up here shortly after that. Please
- 12 remember the admonition.
- We're on a recess.
- 14 (A short recess was taken.)
- 15 THE COURT: Have the record show the
- 16 presence of the attorneys, the defendant, Mr. Almanza, and
- 17 the jury is back in the courtroom.
- 18 Is the State ready to proceed?
- MR. LONG: Yes, your Honor.
- 20 For the record, Detective Snyder is not with
- 21 us. He's been subpoenaed to another court in another
- 22 jurisdiction, so we'd ask the court's permission to excuse
- 23 him for that reason.
- 24 THE COURT: Thank you very much.
- Mr. Green, are you ready?

- 1 MR. GREEN: I am, sir.
- THE COURT: Would the State call the next
- 3 witness, please?
- 4 MR. LONG: State calls Peggy Toporek.
- 5 THE COURT: Ma'am, if you would, come on
- 6 over, please. Right over here, and we'll get you sworn
- 7 in.
- 8 (The witness was sworn.)
- 9 THE COURT: Okay. Ma'am, if you would,
- 10 please, walk around the TV. There you go.
- 11 Okay. Mr. Long?
- 12 MR. LONG: Thank you, your Honor.
- 13 PEGGY TOPOREK,
- 14 called as a witness herein, having been first duly sworn,
- 15 was examined and testified as follows:
- 16 DIRECT EXAMINATION
- 17 BY MR. LONG:
- Q. Ma'am, would you state your name, please?
- 19 A. Peggy Toporek.
- Q. Who do you work for?
- 21 A. The Department of Public Safety Crime Lab in
- 22 Phoenix.
- Q. What do you do for them?
- A. I am a criminalist, and I work in the DNA
- 25 Serology Unit.

- 1 Q. What's a criminalist?
- 2 A. I analyze evidence for DNA, serology, basically
- 3 you're analyzing evidence to assist in a prosecution.
- 4 Q. Before you were analyzing evidence, did you have
- 5 any other job as a criminalist?
- 6 A. Before I went into the serology DNA unit?
- 7 Q. Yes, ma'am.
- 8 A. I was in the drug unit for approximately ten
- 9 years.
- 10 Q. What education do you have that qualifies you to
- 11 be a criminalist?
- 12 A. I have a Bachelor of Science degree in chemistry
- 13 from Northern Arizona University. And I've got the
- 14 classes and the training that's required of the DNA unit
- 15 to be a DNA analyst.
- Q. Can you talk about some of that training,
- 17 training and experience?
- 18 A. The classes are statistics, genetic engineering,
- 19 genetics, biochemistry, those sorts of classes. And then
- 20 the training, DPS has a mentoring program, so I went
- 21 through that training. We also have -- have to have
- 22 yearly training in future trends or new technology.
- Q. How long have you been a criminalist?
- 24 A. It'll be 25 years in March.
- Q. How long have you been with the DNA serology

- 1 unit?
- 2 A. For approximately 15 years.
- 3 Q. Any way you could give us a guess about the
- 4 number of cases you have actively worked as a -- as a --
- 5 in the serology DNA unit?
- 6 A. I -- hundreds, hundreds and hundreds.
- 7 Q. Are you familiar with -- based on your training
- 8 and experience, familiar with the DNA?
- 9 A. Yes.
- 10 Q. Explain to us just if you could about where DNA
- 11 can be found?
- 12 A. DNA is found in various cells throughout the
- 13 body, usually nucleated. You will find them in the mucous
- 14 membranes, the epithelial cells in the mucous membranes,
- 15 which would be in the nose, the mouth, the vaginal cavity,
- 16 also spermatozoa. You have some epithelial cells on your
- 17 hands, you have broken-down epithelial cells on your
- 18 hands, and those are slough cells. So anywhere you're
- 19 going to have a nucleated cell or white blood cell, a
- 20 variety.
- Q. And this is a -- probably take hours and days and
- 22 in some cases months to explain, but in a very brief
- 23 manner, could you just tell us what DNA is?
- 24 A. DNA is Deoxyribonucleic acid. It's the genetic
- 25 material that's found in your body. Like I said, various

- 1 cells throughout your body. It's the same in all of your
- 2 cells, and it's basically what makes you you. It makes
- 3 each person the individual that they are.
- 4 Q. And as your job as a DNA analyst, could you talk
- 5 about why a known sample is critical?
- 6 A. From my work, I generate what's called a profile,
- 7 and basically that is just sizes of DNA. We look at 13
- 8 different locations on the DNA strand, and each of those
- 9 locations we are looking for the two pieces of DNA. We
- 10 size them just like you have a particular shoe size. At
- 11 that particular region, you have two sizes, one from your
- 12 mom, one from your dad. You generate what's called a
- 13 profile of those sizes. The profile means nothing if you
- 14 have nothing to compare it to, so you have to have a known
- 15 standard to compare those numbers to, either to exclude or
- 16 include an individual.
- 17 Q. Okay. So I'm correct, if you were to get a
- 18 sample that contains a profile, you need to compare that
- 19 to a sample to know who you are comparing it to; is that
- 20 accurate?
- 21 A. Yes.
- 22 Q. And you initially talked about what you're
- 23 looking for as far as getting a certain characteristic or
- 24 -- from each parent, did I get that right?
- 25 A. I'm sorry?

- 1 Q. No?
- 2 A. Say that again.
- 3 Q. You said something about getting something from
- 4 each parent, could you just explain that again, please?
- 5 A. Right. Like I said, you have at each of those 13
- 6 locations, you're going to get two pieces of DNA. One you
- 7 got from your mother and one you got from your dad, and
- 8 those are two different sizes of DNA pieces. And you look
- 9 at 13 different locations. And as you -- 13, you're going
- 10 to have enough variability between each individual to be
- 11 able to say, yes, this -- this does match this person.
- 12 Q. And if someone was to watch some of the talk
- 13 shows with Maury Povich and some of these things where
- 14 they do DNA testing to determine paternity or maternity,
- 15 is that how they are able to do that, because they share
- 16 at least one thing in common with their father?
- 17 A. With a parent, yes, correct.
- Q. And one in common with the mother; is that
- 19 accurate?
- 20 A. Yes.
- Q. I'd like to talk to you about the work -- well,
- 22 I'd like to talk to you about the -- these different types
- 23 of places where you find DNA. You said that it's in
- 24 semen?
- 25 A. Yes.

- 1 Q. Spermatozoa?
- 2 A. In spermatozoa.
- 3 Q. In blood?
- 4 A. Yes.
- 5 Q. And then you talked about this thing called
- 6 epithelial cells, did I get that right?
- 7 A. Yes.
- Q. And you described where some of these epithelial
- 9 cells might be found. And I heard you could find it in
- 10 the mucous membranes; is that accurate?
- 11 A. Yes.
- 12 Q. So that includes your mouth?
- 13 A. Your mouth, nasal, vaginal, to some degree the
- 14 rectal lining would have epithelial cells.
- 15 Q. Okay.
- 16 A. The lobe, the deeper layer of your skin will have
- 17 epithelial cells.
- 18 Q. Okay. What about the surface of your skin?
- 19 A. The surface will have sloughed or broken, your
- 20 dead, because your skin is constantly growing and
- 21 sloughing, so it has -- as those skin cells die, they're
- 22 going to rise to the surface, so you'll have broken-down
- 23 epithelial cells. You may have some of the DNA that's
- 24 from those broken cells laying on the skin. And so we're
- 25 getting a DNA profile not really from the true epithelial

- 1 cells, but kind of the waste, the leftover, the
- 2 broken-down part of those cells.
- 3 Q. Okay. How easy is it to get rid of epithelial
- 4 cells or to not -- how volatile are epithelial cells?
- 5 A. Well, you would -- you would lose epithelial
- 6 cells from washing your hands, from rubbing them, from
- 7 transfer, and that's what we base our touch DNA on, is
- 8 from touching a surface. You're making a transfer. Now,
- 9 it just depends on how much is there. If you just washed
- 10 your hands, you're not going to have very much cellular
- 11 material there, so you are not going to transfer anything.
- 12 But if you are considered a slougher, which means you have
- 13 a lot of cells or you don't wash your hands a lot, then
- 14 you're going to leave behind cells, so it depends on the
- 15 person.
- 16 Q. And in this case, we're talking about cells that
- 17 are on the surface of the skin?
- 18 A. Yes.
- 19 Q. And again, when you talk about sloughing, again,
- 20 what we're looking for is dead -- those dead epithelial
- 21 cells that have risen or are on the top of the skin; is
- 22 that accurate?
- 23 A. Right.
- Q. So you said that washing your hands could remove
- 25 these epithelial cells; is that accurate?

- 1 A. Yes.
- 2 Q. To the point where you wouldn't be able to get a
- 3 -- or identify a sample?
- 4 A. Sure.
- 5 Q. Let me see if I can give some real world
- 6 examples. I've washed my hand at the break just a couple
- 7 minutes ago, and I touch this surface, would you expect to
- 8 see -- to find my DNA on this surface?
- 9 A. Probably not.
- 10 Q. Okay. If I was to put my finger in Mr. Kohler's
- 11 mouth and his mouth was -- a swab was taken, would you
- 12 expect to get -- my DNA to be found in Mr. Kohler's mouth?
- 13 A. Probably not, especially since his cells are
- 14 going to overwhelm your cells.
- 15 Q. Explain that, if you can.
- 16 A. His -- his mouth, like I said earlier, is just
- 17 all mucous membrane. It's loaded with epithelial cells,
- 18 so you're going to have so much of his DNA. You usually
- 19 need about five -- five percent of another person's
- 20 contributor to pick it up, so there is going to be so much
- 21 of his DNA there that we wouldn't be able to detect any of
- 22 yours, even if you -- even if you had some DNA on, you
- 23 probably are not -- I'm not going to find it. Just
- 24 there's so much DNA in his mouth.
- Q. And there's no guarantee that my epithelial cells

- 1 would even be left there; is that accurate?
- 2 A. Right.
- 3 Q. You talked about how washing the hands and
- 4 washing those -- those dead cells off can prevent DNA from
- 5 being transferred. What about rubbing or using your hands
- 6 throughout the day?
- 7 A. Sure, right.
- 8 Q. That does -- that would impact your ability to --
- 9 A. Right.
- 10 Q. Sorry?
- 11 A. I'm sorry.
- 12 Any time you touch something or you're
- 13 transferring, so the more you're using your hands,
- 14 touching, rubbing, put gloves on, all that is -- I mean,
- 15 it's common sense, you're cleaning off that surface each
- 16 time.
- 17 Q. Okay. So these epithelial cells that you're
- 18 talking about on touching, they are not sticky or they
- 19 don't adhere?
- 20 A. I don't -- they are not sticky, no.
- 21 Q. You talked about clean hands, that washing your
- 22 hands can impact whether or not you would expect to find
- 23 skin cells or DNA. What about hands that are -- that are
- 24 dirty with grime or dirt, does that impact whether or not
- 25 you would expect to find DNA?

- 1 A. Dirt is DNA's enemy. Anytime you have dirt, it
- 2 destroys DNA. It starts eating away at the bonds on the
- 3 DNA strand, and it starts destroying it. So anytime that
- 4 we see a dirty sample, we just -- you just cringe because
- 5 you know you are not going to get a very good profile. So
- 6 dirt is bad in the DNA world. So it doesn't necessarily
- 7 make it disappear, it just starts breaking it down, and it
- 8 makes it hard to detect what's there.
- 9 Q. How about time? Can time impact -- and let's
- 10 focus again on the touch DNA or the epithelial cells, skin
- 11 cells because there may be a different analysis. Well,
- 12 let me ask this, is there possibly a different time frame
- 13 or discussion when you're talking about blood, semen, or
- 14 semen in dealing with DNA?
- 15 A. Time frame in?
- 16 Q. In how quickly you might expect not to find it?
- 17 A. DNA will remain at room temperature or we freeze
- 18 it, but it is -- it will remain at room temperature. It
- 19 is not so much that it's breaking down. It's what happens
- 20 to it. If you had DNA on your hands and you never washed
- 21 them or you sat without touching anything, it's going to
- 22 stay there. But that's not how people are. You use your
- 23 hands all the time, so it's going to -- there's going to
- 24 be transfer.
- 25 As far as blood and semen, if you had -- if

- 1 you were a rape victim and you had semen in your panties,
- 2 that would stay there because there's nowhere for it to go
- 3 really. Whereas if the DNA is on your hand, it has
- 4 somewhere to go, it's transferring.
- 5 Q. In talking about -- well, so in dealing with a
- 6 case involving skin cells where they are detecting some
- 7 form of skin cells on another person, if the time frame
- 8 between the test and the event where the contact took
- 9 place is a day later, about 24 hours, does that time frame
- 10 impact whether or not you'd expect to get DNA?
- 11 A. I would expect there to be little to no DNA left
- 12 from a person other than the individual.
- 13 Q. Okay. And so you would expect to get DNA from
- 14 the person that you're taking a sample from; is that
- 15 accurate?
- 16 A. Yes.
- 17 Q. For example --
- 18 A. Any -- any range of -- from any range, either
- 19 trace amounts or a lot of DNA.
- Q. Okay. But as to another person, it would be
- 21 transferring through their skin cells within a day,
- 22 approximately 24 hours, you would not expect to get that,
- 23 or it would be very little?
- A. It would be very little.
- Q. Let's talk about if there's very little.

- 1 A. Okay.
- 2 Q. Do you have a threshold that you acquire in order
- 3 to be able to determine a profile?
- 4 A. Yes, we have thresholds.
- 5 Q. So I guess to word it differently, is it possible
- 6 that there could be DNA present, but you, based on your
- 7 standards, would be unable to identify that?
- 8 A. Well, in this case, I mean, there was no
- 9 detection of the second person on -- you cannot -- like
- 10 you said, we have thresholds. You cannot go below that
- 11 threshold to start looking for other DNA because it is not
- 12 accurate.
- Q. And earlier you talked about a sample
- 14 overwhelming, a second sample?
- 15 A. Yes.
- Q. And the example with someone's mouth or Mr.
- 17 Kohler's mouth and my -- my skin cells?
- 18 A. Right.
- 19 Q. And you said in that case that it would be
- 20 overwhelmed to the point where you wouldn't detect my DNA;
- 21 is that accurate?
- 22 A. Yes.
- Q. Does that mean my DNA is absolutely,
- 24 unequivocally not in his mouth?
- 25 A. No. I just could not detect it.

- 1 Q. I'd like to talk to you about your methods, or
- 2 the work that you do rather, is it realistic to test every
- 3 item that comes in to the DPS Crime Lab on every case?
- 4 A. No.
- 5 Q. Why is that?
- 6 A. We do not have the manpower.
- 7 Q. Do you also have certain standards in place?
- 8 A. Yes, we have standards.
- 9 Q. And does that require your work to be reviewed?
- 10 A. Yes.
- 11 Q. So you are not the only one that looks at
- 12 something and then makes a determination, and then it's
- 13 sent out; is that right?
- 14 A. Right. We have two reviews.
- 15 Q. Did you say two reviews?
- 16 A. Two, yes.
- 17 Q. And does the Arizona DPS Crime Lab have any
- 18 accreditations?
- 19 A. Yes.
- 20 Q. Can you tell us what those are?
- 21 A. It's ASCLD. It's the American Society of Crime
- 22 Lab Directors. And basically it's an organization
- 23 throughout the U.S. that sets the criteria for -- for
- 24 acceptable standards, acceptable methods that are used
- 25 throughout the forensic community. And we are a part of

- 1 that.
- 2 Q. You talked about that it's just simply not
- 3 realistic to test every single item that comes in in every
- 4 case. What factors go into what items are tested?
- 5 A. You have to decide which piece of evidence is
- 6 going to give you -- well, you think from your experience
- 7 that you're going to be most likely to get a DNA profile
- 8 from -- from whoever you're looking for, it you're looking
- 9 for the victim or looking for the standard. Just from
- 10 your experience or for me, it's for my experience, where
- 11 do I think the best evidence is going to be, and that's
- 12 where I have to -- like you said earlier, you cannot do
- 13 every piece of evidence, so I have to decide which --
- 14 which is going to be most likely that I'll get a good
- 15 result.
- 16 Q. Okay. Do the facts go into play in determining
- 17 what should be tested?
- 18 A. Yes.
- 19 Q. And I think Ms. Petrin used the phrase, it's
- 20 story driven. Does that mean based on the information,
- 21 all the information that's available?
- 22 A. Yes.
- Q. And as a scientist, as a DNA analyst, do you look
- 24 into ---look at real world examples or real world common
- 25 sense in determining what should or should not be tested?

- 1 A. Yes.
- Q. For example, in this case, there was some
- 3 underwear that was tested at the serology phase, are you
- 4 familiar that that was done?
- 5 A. Yes.
- 6 Q. And that the testing in that was positive for
- 7 blood, are you familiar with that?
- 8 A. Yes.
- 9 Q. And Ms. Petrin testified that she is not the one
- 10 that would do the analysis to determine whose blood that
- 11 is, and that is consistent with your understanding?
- 12 A. Yes.
- 13 Q. And whose job would that be?
- 14 A. Nikki does the serology, which is looking for the
- 15 biological evidence, and then it would then go on to a DNA
- 16 analyst, who then does the DNA analysis.
- Q. And you're one of those DNA analysts; correct?
- 18 A. Yes.
- 19 Q. So with this information, with information about
- 20 there being blood in a little girl's underwear and
- 21 information that there was bleeding injury directly where
- 22 the staining of that blood was in that little girl's
- 23 injuries, specifically at the base of her vagina --
- 24 A. Right.
- Q. -- would you take those factors in determining

- 1 whether or not it's necessary to test that blood to see
- 2 whose it is?
- A. Right. Because like we said earlier, we're
- 4 limited on how much -- how many items we can process.
- 5 There's -- in my mind, there was really no reason to test
- 6 blood from a pair of panties from a girl. There is no
- 7 reason to think that a suspect would bleed in somebody
- 8 else's panties, so it's important that the blood that
- 9 Nikki determined there was blood there because a girl of
- 10 that age shouldn't have blood in her panties. If it was
- 11 an older female, you may rethink it, but -- so it's
- 12 important that you tested that there was blood there. But
- 13 there's really no reason to go any further to say, well,
- 14 maybe, could it be the suspect, that's highly unlikely, so
- 15 you wouldn't -- and I don't want to say -- I say waste,
- 16 but I don't mean it in a bad way, you don't want to waste
- 17 a sample analysis on that when you can be using your
- 18 resources to do another piece of evidence that might be a
- 19 little bit more probative.
- Q. Okay. And probative might be a good word.
- 21 Given the factors that were at your disposal
- 22 here, the fact that there was blood in a little girl's
- 23 underwear, the fact that there was a report from the girl
- 24 and the mother that that blood was there, a report from
- 25 two doctors or a doctor and a nurse that there was a

- 1 bleeding injury right in that location, in your mind as a
- 2 scientist, as a DNA analyst, is it probative to see
- 3 through a DNA -- through a DNA exam whose blood that is?
- 4 A. Right. There's no reason to think it would be
- 5 anybody's blood other than the victim's.
- 6 Q. So even with your experience with DNA, you
- 7 believe that conclusions can be drawn through other
- 8 methods other than just DNA; is that accurate?
- 9 A. Absolutely.
- 10 Q. In this case, what did you examine?
- 11 A. I examined the fingernails and the scrapings from
- 12 Fernando Almanza.
- MR. LONG: And, your Honor, permission to
- 14 approach?
- THE COURT: Go ahead, sir.
- 16 BY MR. LONG:
- 17 Q. I'm showing you Exhibit Nos. 107 and 111, do you
- 18 recognize those?
- 19 A. Yes. This is the report that I generated and
- 20 my -- and my notes.
- Q. I'm sorry. You said this was -- Exhibit No. 107
- 22 is the report you generated?
- 23 A. Yes.
- Q. And Exhibit No. 111, what is that?
- 25 A. These are my case notes.

- 1 Q. Okay. So you said you tested fingernail
- 2 clippings and scrapings; is that accurate?
- 3 A. Yes.
- Q. Tell us whether or not you found -- well, tell us
- 5 if you found any DNA in those fingernail samples?
- 6 A. Yes, I did.
- 7 Q. And whose profile did that DNA match?
- 8 A. Fernando Almanza.
- 9 Q. And do you know whose fingernails and scrapings
- 10 those came from?
- 11 A. They were from him.
- 12 Q. Is that an expected result?
- 13 A. Yes.
- Q. And this may be very -- very common sense, but
- 15 why is that an expected result?
- 16 A. Because they are from his body. Many times we
- 17 use fingernails as a secondary standard, so we know that
- 18 there is going to be DNA on fingernails. And it actually
- 19 was -- I called it debris. I believe they were scrapings,
- 20 so you would expect for you to have year old DNA on your
- 21 fingernails and on the underside of your fingernails.
- 22 Q. Okay. And would that include your own epithelial
- 23 cells underneath the fingernails?
- 24 A. Yes.
- 25 Q. Did you also find an indicator of dirt or debris

- 1 in those scrapings?
- 2 A. Yes.
- 3 Q. And that's different than epithelial cells; is
- 4 that correct, the dirt or debris?
- 5 A. I didn't analyze what it was really. That's not
- 6 really what my job is, is to decide what the debris is. I
- 7 just called it that. When I did my analysis, I swabbed
- 8 the fingernails and that debris to pick up any DNA that
- 9 would be present.
- 10 Q. But there was material that's not DNA; is that
- 11 accurate?
- 12 A. I called it debris. It looked like dirt. I
- 13 didn't analyze it, though.
- 14 Q. Fair enough.
- 15 And you testified previously that dirt is
- 16 DNA's enemy; is that accurate?
- 17 A. Yes.
- 18 Q. Did you find -- did you have a sample from the
- 19 victim in this case, Ada Wilhelmi?
- 20 A. Yes.
- Q. Were you able to find a profile or DNA in what
- 22 you tested that matched Ada Wilhelmi?
- 23 A. No.
- 24 Q. So not finding DNA from a victim in this case
- 25 when there's been an allegation that he touched her, you

- 1 must certainly be able to conclude that that touch did not
- 2 happen; is that accurate?
- 3 A. No.
- 4 Q. Why is that?
- 5 A. Just because you touch something doesn't mean you
- 6 leave DNA behind. I do many, many cases of trace DNA, and
- 7 many times I don't get a profile. The absence of DNA
- 8 doesn't mean that an event didn't occur or somebody didn't
- 9 touch. Now, if somebody's DNA is there, then there's some
- 10 explaining that has to be done, but the absence of DNA
- 11 doesn't mean that something didn't happen.
- 12 Q. So let me see if I can flush out that. In
- 13 looking for DNA and in testing DNA, what you're really
- 14 looking for is the presence of DNA; is that accurate?
- 15 A. Yes.
- 16 Q. Can conclusions be drawn when DNA is found?
- 17 A. Yes.
- 18 Q. And just give us an example of what types of
- 19 conclusions can be drawn when DNA is found?
- 20 A. Well, if you found -- if there was -- like my
- 21 example earlier, if there was a rape and there was semen
- 22 in a girl's panties and you found the male suspect's
- 23 profile, then there's some explaining that has to be done
- 24 because his DNA should not be in her panties.
- 25 Q. Let's stick with your exam.

- 1 A. Okay.
- 2 Q. The fact that semen is not in the panties, is
- 3 that an indicator that the event didn't happen or that he
- 4 did not ejaculate?
- 5 A. No. That's not -- it just means that he didn't
- 6 ejaculate inside of her. It didn't -- and I have many
- 7 cases like that, where it's alleged touching, alleged
- 8 sexual activity, but there's no DNA left behind. And it
- 9 doesn't mean it didn't happen, it's just I was not able to
- 10 detect anything.
- 11 Q. So if there is no -- well, let me -- are you
- 12 familiar with some of the television shows that are out
- 13 there that talk about forensic analysis and this type of
- 14 thing?
- 15 A. Like CSI-type. Not really.
- 16 Q. At this point, there's so many.
- 17 A. I don't watch them.
- 18 Q. Are you familiar with them?
- 19 A. Yeah.
- Q. Generally?
- 21 A. Yeah.
- Q. Is it your understanding that what you see on TV
- 23 is what happens in the real world?
- 24 A. No.
- Q. Wait a minute. TV -- TV is lying to me?

- 1 A. Yeah.
- 2 Q. So let me ask it this way. The fact that you
- 3 didn't find any DNA on the defendant's nail clippings or
- 4 scrapings, is it reasonable to conclude based on that that
- 5 this man did not touch this little girl sexually or
- 6 penetrate her vagina?
- 7 A. I don't -- I don't know how you can say that.
- 8 Just like I said earlier, just because her DNA wasn't on
- 9 his fingers doesn't mean that the event didn't occur.
- 10 There was time in between, so --
- 11 Q. So based on your training and experience, it
- 12 would not be reasonable to conclude that?
- 13 A. Right.
- 14 Q. Based on what you found?
- 15 A. Yes.
- MR. LONG: Thank you, ma'am. Those are all
- 17 my questions.
- 18 THE COURT: Thank you, sir.
- 19 Mr. Green?
- 20 CROSS-EXAMINATION
- 21 BY MR. GREEN:
- Q. So if we follow Mr. Long's logic to its maximum
- 23 conclusion, if you don't find DNA, pretty much anybody
- 24 could be a perpetrator; correct?
- 25 A. If you don't find DNA on?

- 1 Q. It doesn't mean it didn't happen, you just said
- 2 that?
- 3 A. Right.
- 4 Q. We have no indication because there's no DNA as
- 5 to who did something; right?
- 6 A. Right.
- 7 Q. It could be anybody?
- 8 A. Sure. And that's -- you know, that's why you
- 9 need evidence other than DNA.
- 10 Q. All right. You talked about the panties that you
- 11 did not test; correct?
- 12 A. Right.
- Q. And you didn't test because there -- it was blood
- 14 evidence, and I believe, and correct me if I get this
- 15 wrong, but I believe you said that there was an injury
- 16 that could explain the blood evidence, and so you didn't
- 17 think you would find DNA from some other party in the
- 18 underwear?
- 19 A. I didn't believe that the blood would be from
- 20 anyone other than her.
- Q. Okay. Are you able to get DNA from the blood --
- 22 or would you have been -- if you had tested it, been able
- 23 to get the blood, DNA from the blood in the panties?
- 24 A. Yes.
- 25 Q. And you would have been able to get sufficient

- 1 DNA you believe in your experience to determine where
- 2 that -- whose blood that was?
- 3 A. Yes.
- Q. Okay. Now, what's the difference between
- 5 determining blood type and determining DNA from blood?
- 6 A. What do you mean? You mean like the ABO typing?
- 7 Q. Let's go way back in time.
- 8 A. Okay. You mean ABO typing?
- 9 Q. Yeah. The days before DNA when forensics was
- 10 about the blood type as opposed to the DNA, okay?
- 11 A. Yes.
- 12 Q. Is that a different process than the DNA?
- 13 A. Absolutely.
- 14 Q. And is blood types still today a valid piece of
- 15 evidence that can help in the determination of whether or
- 16 not this blood is from a certain person?
- 17 A. It can -- it's probably a better screening
- 18 because it's just -- you have such large percentages of
- 19 individuals that can go into each of those categories,
- 20 like the A or B or O part of the blood. You can have -- I
- 21 don't know what the statistics are, but 50 percent of your
- 22 population can be an A, whereas -- which was fine in the
- 23 '80s, but now -- now with DNA, you can say it's one in a
- 24 quadrillion, so there's no reason to do that type of
- 25 testing now for forensics.

- Q. Okay. So if I understand what you're saying, is
- 2 that it's more of an exclusionary -- it could be an
- 3 exclusionary thing where if the blood and the underwear is
- 4 the type O and the alleged perpetrator is a type A, it
- 5 would exclude him as possibly being; is that right?
- 6 A. I would think so.
- 7 Q. Okay.
- 8 A. I didn't do -- that was a couple of years before
- 9 my time, but that's my understanding, yeah.
- 10 Q. So if there was DNA on this little girl's private
- 11 parts --
- 12 A. Yes.
- Q. -- and she was bleeding into her underwear --
- 14 A. Yes.
- 15 Q. -- would that DNA -- let me start that over
- 16 again.
- 17 If there was third-party DNA, somebody
- 18 else's DNA on this little girl's private parts --
- 19 A. Yes.
- 20 Q. -- not her own, but somebody else's --
- 21 A. Yes.
- 22 Q. -- and she was bleeding into her underwear --
- 23 A. Yes.
- Q. -- by testing that underwear, would you be able
- 25 to find and identify that third-party DNA?

- 1 A. You could if there was enough, yeah.
- 2 Q. Enough blood or enough DNA?
- 3 A. Enough DNA. Like I said earlier, it's usually
- 4 about five percent that we need to make that -- to be able
- 5 to detect that on our instruments and make that
- 6 separation.
- 7 Q. Okay. So if there was DNA from a perpetrator in
- 8 this case and you had tested the blood in the underwear - extstyle -
- 9 A. Yes.
- 10 Q. -- if you were able to find DNA of such a
- 11 sufficient quantity, you could have pretty much identified
- 12 who that is; right?
- 13 A. I could have -- I could have been able to see if
- 14 there was male DNA there.
- 15 Q. Okay.
- 16 A. It -- depending on how much DNA, if there was a
- 17 lot of DNA, I could have identified it.
- 18 Q. You had a sample from my client; correct?
- 19 A. Yes.
- Q. So that's your known sample, you knew where that
- 21 came from?
- 22 A. Yes.
- Q. And you could have compared that to the DNA in
- 24 the underwear if there was DNA in the underwear?
- 25 A. Yes, yes.

- 1 Q. But testing was never done, was it?
- 2 A. No.
- 3 Q. And was that ever requested?
- 4 A. No.
- 5 Q. Was it ever requested by the officer?
- 6 A. No.
- 7 Q. And you also made your own determination, based
- 8 on your training and experience and limited resources,
- 9 that that piece of evidence was not as important as some
- 10 of the other things that you were testing; is that right?
- 11 A. I -- in this case, I was instructed by the
- 12 previous county attorney which items he wanted analyzed.
- 13 Q. Okay.
- 14 A. Yes.
- 15 Q. You tested -- well, in total, it looks like you
- 16 tested two buccal swabs or buccal --
- 17 A. Buccal, yeah.
- 18 Q. -- from my client?
- 19 A. Uh-huh.
- Q. And that gave you your known DNA?
- 21 A. Yes.
- Q. And you tested two buccal swabs from the victim?
- 23 A. Yes.
- Q. And you also tested the fingernails and the
- 25 debris?

- 1 A. Yes.
- Q. And your results in your report say that the only
- 3 -- in comparing the known samples to the tested samples,
- 4 like I said, I guess --
- 5 A. Yes.
- 6 Q. -- that the only common thread in those samples
- 7 was that we know now for sure that those fingernails came
- 8 from my client?
- 9 A. Yes.
- 10 Q. We don't know anything -- there was no DNA
- 11 connection that you were able to find between my client
- 12 and Ada?
- 13 A. Correct.
- MR. GREEN: No more questions, your Honor.
- THE COURT: All right, sir.
- Mr. Long, redirect?
- 17 REDIRECT EXAMINATION
- 18 BY MR. LONG:
- 19 Q. You were asked about whether or not anyone
- 20 requested these items to be tested?
- 21 A. Yes.
- Q. Do you recall those questions?
- 23 A. Yes.
- Q. In your experience, can defense request for those
- 25 to be tested?

- 1 A. They have access to the evidence. We maintain
- 2 all the evidence in our frozen storage, and if defense
- 3 would like to have the evidence analyzed, they can take it
- 4 and have it analyzed.
- 5 Q. So that is available to them?
- 6 A. Yes.
- 7 Q. You didn't keep it from them?
- 8 A. Correct.
- 9 Q. You were asked questions about the defendant's
- 10 DNA potentially in being found in this little girl's
- 11 panties and whether or not that test could be done?
- 12 A. Right.
- 13 Q. And you were given a very specific fact, and
- 14 that's if his DNA was in there, and I think you clarified
- 15 that if enough of his DNA was in there, that that's true,
- 16 you could?
- 17 A. Right.
- 18 Q. Correct?
- 19 A. Right.
- Q. But in this case, the allegation is that he put
- 21 his finger in her vagina?
- 22 A. Okay.
- Q. Given that fact, are we talking about potentially
- 24 trying to find his epithelial cells in her underwear, is
- 25 that what we'd be looking for?

- 1 A. Right.
- 2 Q. So your prior testimony about epithelial cells
- 3 then apply to this scenario; is that accurate?
- 4 A. Yes.
- 5 Q. So then with that, would you expect to find his
- 6 epithelial cells in her underwear?
- 7 A. It would be very difficult. I've done a lot of
- 8 the -- these touch cases in the last two years just
- 9 because they have been sitting for so long in the lab.
- 10 Many labs don't do touch cases like this just because you
- 11 don't get very good results, if any.
- 12 Q. Sorry. Can I stop you there. Did you say that
- 13 there are labs that actually won't do the testing that he
- 14 is proposing?
- 15 A. Right. Just because they have not had success
- 16 getting a male profile just from touching the genital
- 17 areas. So in the last couple of years I have been doing a
- 18 lot of these cases that have been sitting, and I have
- 19 not -- the only case that I have gotten -- that I could
- 20 actually report out a match is when the suspect licked his
- 21 fingers prior to touching. From the story, he licked his
- 22 fingers prior to touching the girl, so I was actually
- 23 getting the DNA. Not from his skin, but from his saliva.
- Q. And that's the only case?
- 25 A. That's the only case of these touching. I might

- 1 get a trace amount of DNA from the male, but it's just --
- 2 you end up having to do a different technology, which is
- 3 called Y-STRs, and you're just looking for male DNA. And
- 4 the statistics are one in two, and the Y profile carries
- 5 from the whole lineage of the family, so it's --
- Q. Let me see if I can flush this out a little bit
- 7 more.
- B Did you actually keep data on the number of
- 9 cases where you analyzed or touched DNA?
- 10 A. Yes. We have that data at the lab.
- 11 Q. Do you know approximately how many they were?
- 12 A. I can't remember.
- 13 Q. Okay. But regardless of the number that you
- 14 tested, was it over 50?
- 15 A. It was -- it was probably between 30 and
- 16 50 cases.
- 17 Q. And of those, only one instance did you find
- 18 that; is that accurate?
- 19 A. Right.
- Q. And based on the story on the facts, you believed
- 21 it was from saliva in that case?
- 22 A. Right. From the -- from the victim's scenario.
- Q. Does this background that you have related to
- 24 this type of testing, does that instruct why you might not
- 25 test certain items?

- 1 A. Yes.
- 2 Q. Now, I want to ask you about underwear. And you
- 3 were asked about testing underwear. Are you familiar with
- 4 any instances or any research or studies that relate to
- 5 the testing of underwear?
- 6 A. For?
- 7 Q. For male DNA or for DNA?
- 8 Specifically let me ask this question, are
- 9 you familiar with a study related to the testing of brand
- 10 new, newly bought underwear for DNA?
- 11 A. I'm sure there's a study. I am not -- I haven't
- 12 read it, so --
- 13 Q. Based on your training and experience, is it
- 14 possible that DNA from workers who work in a plant where
- 15 underwear is put together and packaged, is it possible
- 16 that their DNA could be found in underwear or underwear?
- 17 A. I'm only going by what we've had in the lab.
- 18 Some of our -- they are called Microcon cups. They are
- 19 filters. Some of those that we have gotten in the lab
- 20 have had profiles of them, and they are supposed to be in
- 21 a clean environment. And they traced it back to a worker.
- 22 That's all I'm basing my opinion is -- is anything that's
- 23 mass produced, if they are not wearing hair nets, masks,
- 24 gloves, then there is the potential.
- I don't know about underwear, though. I

- 1 haven't -- I haven't read any studies on that, but for
- 2 other -- for other pieces of equipment that we've used,
- 3 there has been DNA from the factory worker.
- 4 Q. So the old adage regarding whether or not you'd
- 5 expect to find the defendant's touch DNA, in this case,
- 6 little girl's panties --
- 7 A. Right.
- 8 Q. -- would you expect to find that?
- 9 A. I would not suspect that it would be there. It
- 10 would be very -- it would be highly unlikely that his --
- 11 the DNA from a finger is going to be enough that I can
- 12 detect it over her -- not only the blood, but also the
- 13 epithelial cells that a girl will always have epithelials
- 14 because it's a vaginal mucous lining that goes into the
- 15 panties, so you have that, too. So you almost have twice
- 16 as much DNA from the female working against the amount of
- 17 DNA you're going to get from the finger.
- 18 Q. So if I heard you correctly, you've got two
- 19 different problems with finding DNA?
- 20 A. With the female panty.
- Q. And one of those is the fact that it would be
- 22 unexpected or unlikely to even get some touch DNA or skin
- 23 cells from another person in those panties, that's one
- 24 issue; is that accurate?
- 25 A. Right.

- 1 Q. But did I hear you that the second issue is that
- 2 there would be so much of the person who is wearing the
- 3 panties, in this case the four-year-old girl, that would
- 4 overwhelm any DNA that might be there; is that accurate?
- 5 A. Right. So it's really a deduction. That's
- 6 really what it comes down to. I can only detect so much,
- 7 so --
- 8 Q. And is this the reason why you cannot make
- 9 conclusions based on the lack of the presence of DNA; is
- 10 that accurate?
- 11 A. Right.
- 12 Q. And so it would not be reasonable to conclude
- 13 that something didn't happen because of your non-finding;
- 14 is that accurate?
- 15 A. Right.
- 16 Q. And you testified earlier that even as a
- 17 scientist, as a person trained in dealing with DNA, that
- 18 you do hold the opinion that you can make conclusions
- 19 about things based on other factors other than DNA; is
- 20 that accurate?
- 21 A. Absolutely.
- MR. LONG: Thank you, ma'am.
- THE COURT: Mr. Long, may this witness be
- 24 excused?
- MR. LONG: Yes, your Honor.

```
1
                  THE COURT: Mr. Green?
 2
                  MR. GREEN: Yes, your Honor.
 3
                  THE COURT: Okay. Ma'am, you are excused.
    They did invoke the Rule, so please don't talk to anybody
 4
 5
    else involved.
 6
                  THE WITNESS: Okay. Thanks.
 7
                  THE COURT: And the exhibits are ours. I'll
 8
    take them. Thank you.
 9
                  (Witness excused.)
10
                  THE COURT: Can I see the attorneys up here
11
    real quickly, please?
12
                  (Proceedings were had outside the hearing of
13
    the jury and court reporter.)
14
                  THE COURT: Okay. Mr. Long, the next
   witness.
15
16
                  MR. LONG: Yes, your Honor. State calls
17
   Jackie Hess.
18
                  THE COURT: Ma'am, if you would, all the way
   forward, please. And right over here first. We'll get
19
20
   you sworn in.
21
                  (The witness was sworn.)
22
                  THE COURT: Come on over and have a seat,
23
   please.
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THE COURT: Mr. Long.

MR. LONG: Thank you, your Honor.

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- 1 JACKIE HESS,
- 2 called as a witness herein, having been first duly sworn,
- 3 was examined and testified as follows:
- 4 DIRECT EXAMINATION
- 5 BY MR. LONG:
- 6 Q. Good morning.
- 7 A. Good morning.
- 8 Q. Would you please introduce yourself to the jury?
- 9 A. My name is Jackie Hess, and I'm a family nurse
- 10 practitioner. I work for Phoenix Children's Hospital.
- 11 Q. Working for Phoenix Children's Hospital, do you
- 12 have any particular focus or specialty?
- A. Right. My specialty is forensics. I have been
- 14 on the child protection team since there at Phoenix
- 15 Children's since 2006. Prior to that, I worked at Cooks
- 16 Children's Hospital in Fort Worth, Texas, for a couple of
- 17 years doing the same thing. And I started actually in
- 18 2002 working for St. Pat's Hospital doing sexual assault
- 19 exams.
- 20 Q. Can you take us through just some of your
- 21 education and training that got you to this point in your
- 22 career?
- 23 A. Sure. I've been in the nursing profession for
- 24 over 30 years. I have an advanced practice degree.
- 25 have my Master's in nursing, and I'm Board certified as a

- 1 family nurse practitioner. I've been doing child physical
- 2 and sexual abuse since 2002.
- 3 Q. Tell us -- would you tell us generally what --
- 4 what a day looks like for you as a forensic -- I'm sorry.
- 5 I want to get your title right. I know you're a nurse
- 6 practitioner. You said as a forensic -- could you give us
- 7 what you are again?
- 8 A. Right. I'm on the child protection team there at
- 9 the Phoenix Children's Hospital, so we have on staff three
- 10 pediatricians and three nurse practitioners, so we're
- 11 considered the forensics team for child abuse. So we
- 12 actually have our office downtown at Child Help, which
- 13 Phoenix Police Crimes Against Children are upstairs and
- 14 downstairs.
- 15 We're located with the CPS and mental
- 16 health, so when the children come into the Child Advocacy
- 17 Center, it's like a one-stop shop. They can come in for
- 18 their interview and their physical exam and everything is
- 19 taken care of at one time.
- We do cover Maricopa County and part of
- 21 Pinal County, so we do travel to the other advocacy
- 22 centers in Maricopa County and down to Eloy.
- Q. I'd like to talk a little bit about your
- 24 experience in dealing with children. Do you have a
- 25 particular accreditation or anything that allows you to

- 1 see children?
- 2 A. I'm a family nurse practitioner, so I can see
- 3 children as well as adults. But I have taken extensive
- 4 training in child and sexual physical abuse, and I'm
- 5 certified as a SANE examiner, and I'm also Board certified
- 6 as a family nurse practitioner.
- 7 Q. I'd like to talk to you generally about the area
- 8 of sexual abuse in children, specifically in females?
- 9 A. Right.
- 10 Q. You talk about the -- how common it is to find --
- 11 to get medical findings related to sexual abuse?
- 12 A. Typically looking at children, in my experience
- 13 and what I've been taught, if you have a hundred children
- 14 and they all have allegations of sexual abuse,
- 15 approximately five out of that hundred are actually going
- 16 to have physical evidence indicative of sexual abuse. So
- 17 95 percent of the kids that come in with the allegations
- 18 of sexual abuse, their exams are completely normal.
- 19 Q. And do those normal exams indicate to you that no
- 20 abuse occurred?
- A. No. A normal exam does not mean that something
- 22 didn't happen. It just means that we cannot physically
- 23 see anything. Now, the reason for that is typically
- 24 children -- typically they don't disclose right away, so
- 25 by the time we do see the children, there's been time

- 1 that's passed, and so there is no physical findings.
- Also, the genital area, the mucosal that's
- 3 typically injured in sexual abuse, it heals very fast.
- 4 It's very rapid. The tissue in the genital area is like
- 5 the inside of your mouth. If you ever bit your cheek, you
- 6 know within a couple of days, it's healed. And, of
- 7 course, a lot of times the actual sexual abuse act,
- 8 whether it be rubbing, touching, does not actually inflict
- 9 any trauma that we can see.
- 10 Q. You talked about how quickly this area of the
- 11 body heals. Approximately how long would it take for an
- 12 injury in the area of the vagina to heal completely?
- 13 A. Completely, within a couple of days. Most
- 14 trauma, genital trauma, is gone. Again, it depends on
- 15 what kind of injury that -- you know, if it was extensive
- 16 or not, but typically within a couple of days injuries are
- 17 gone.
- 18 Q. And does that injury leave -- leave scars or
- 19 signs generally, in your experience?
- 20 A. In my experience and knowledge, typically we
- 21 seldom see any kind of scarring because that tissue often
- 22 heals completely back to normal where you don't see any
- 23 type of it, and it doesn't leave any type of scars.
- Q. I'd like to talk to you about the concept of a
- 25 virginity test. Are you familiar just with that concept?

- 1 A. Right. Virginity is considered something that
- 2 you actually give away. They are talking about the actual
- 3 giving away of their virginity related to trauma or the
- 4 hymen, per say. And the hymen, which is a collar of
- 5 tissue that surrounds the genital opening going into the
- 6 vagina, it's a collar of tissue that does not cover or --
- 7 so in actual sexual penetration, there is nothing to break
- 8 or to tear with penetration because again, you still have
- 9 that opening there.
- 10 Q. So is there any way to determine, based on the
- 11 hymen, whether or not there's been penetration?
- 12 A. No. Because the -- typically the hymen,
- 13 especially in your -- in your pubescent girls, girls that
- 14 have started their menses or their period, once the
- 15 hormone estrogen comes under the hymen -- the hymen comes
- 16 under the influence of estrogen, that it has more of a
- 17 capability to stretch.
- Now, in your prepubescent girls, your
- 19 younger girls, it still has somewhat an ability to
- 20 stretch. The hymen, though, in your prepubescent girls,
- 21 is very painful if you touch it. Whereas, that pain goes
- 22 away once the girls start their menses.
- Q. Okay. And although a prepubescent girl it might
- 24 be painful, if there was a report of a finger penetrating
- 25 the hymen, would you necessarily expect to see signs of

- 1 that in a prepubescent girl?
- 2 A. Typically when you're thinking about or you're
- 3 examining a child with sexual abuse, the most common area
- 4 that is -- that we typically see trauma in in sexual abuse
- 5 is the area right below the hymen called the posterior
- 6 fourchette or the posterior commissure in your younger
- 7 children. And so with what we refer to as digital contact
- 8 or fingers, yes, they can penetrate the hymen. But
- 9 typically in those types of contacts, we see more
- 10 scratches or abrasions.
- 11 Q. Ms. Hess, I have a diagram. Would you be
- 12 comfortable standing up and explaining the anatomy to the
- 13 jury? Would that be helpful in describing some of the
- 14 areas that you're talking about?
- 15 A. I think so. Yes.
- MR. LONG: With the court's permission, your
- 17 Honor?
- THE COURT: Go ahead, ma'am.
- MR. LONG: And this is Exhibit No. 101.
- THE COURT: There you go.
- 21 BY MR. LONG:
- Q. Ms. Hess, would you explain to us what it is
- 23 we're seeing here?
- If it's helpful, please stand and point to
- 25 the screen.

- 1 A. Okay. This is a prepubescent girl, and she is --
- 2 she's on her back. She's in the lithotomy position, so
- 3 her knees are up. So this is the mons pubis. This is the
- 4 outside lips that grow hair, which is -- in your older
- 5 adults is known as where they grow the hair. And as far
- 6 as the anatomy, the outside lips are called the labia
- 7 majora.
- 8 The smaller lips that you see coming down
- 9 halfway, they are called the labia minora. In your
- 10 younger girls before they start their period, they are not
- 11 fully developed, so they don't come all the way down as
- 12 you would see in an adult female.
- So also right up here is the urethra.
- 14 That's where the urine comes out.
- This right here is the hymen, and this is a
- 16 crescent. They call it a crescentic-shaped hymen because
- 17 it's shaped like a crescent. So this is the posterior rim
- 18 that we're looking at. And the hymen goes all the way
- 19 down here.
- So down in this area right here below the
- 21 hymen, that area right there is called the fossa
- 22 navicularis, okay. Below that a little bit is the
- 23 posterior fourchette, or in the younger children the
- 24 posterior commissure.
- So then you have the perineum. And then, of

- 1 course, down here is the anus.
- 2 Q. Now, Ms. Hess, you gave us a number of terms.
- 3 And one of the terms I didn't hear was vulva. Are you
- 4 familiar with the term vulva?
- 5 A. Vulva is just the whole external genitalia
- 6 because you don't get into the internal genital area until
- 7 you pass the hymen because remember this is that collar of
- 8 tissue that surrounds the vaginal opening, but it doesn't
- 9 cover into the vaginal canal. So the vulva is your
- 10 external genitalia.
- 11 Q. And before we show the diagram, you said that
- 12 there is a place where is most commonly found injury, did
- 13 I get that right?
- 14 A. Right. And that's right down here. It's called
- 15 the posterior fourchette and the fossa because typically
- 16 with sexual abuse with a blunt force trauma, whether it be
- 17 with a finger or a penis, when they are attempting to get
- 18 into the opening of the hymen and the vagina, this is the
- 19 area they'll hit first. And this is the area most
- 20 commonly injured.
- 21 Q. So my question I think that -- before that was
- 22 whether or not a finger could go through the hymen and
- 23 not -- not show any injury to the hymen in a prepubescent
- 24 girl?
- 25 A. Yes. It's possible the finger can go right in

- 1 the hymen. In fact, before we received more sophisticated
- 2 type of lab tests, obtained in lab tests, instead of urine
- 3 tests, we had to do cultures. So we would have to put the
- 4 swab right directly in without touching the hymen to
- 5 obtain cultures. So, yes, you can -- you know, the size
- 6 of the opening when you're talking about the hymen does
- 7 vary a little bit in each child, but it doesn't have any
- 8 significance. But it can be, you know, a centimeter to
- 9 less than a centimeter in diameter. And, you know, like
- 10 2.5 centimeters equal an inch. So there is enough opening
- 11 for a finger to get in.
- 12 And remember, those tissues, even though the
- 13 child is prepubescent, it will stretch, and you can still
- 14 get a finger in there without causing any kind of trauma
- 15 that I could see with the exam.
- 16 Q. So even if that hymen was stretched a bit, you
- 17 would not see any evidence of that stretching; is that
- 18 accurate?
- 19 A. Correct.
- 20 Q. And in fact, is it common to see damage to the
- 21 hymen?
- 22 A. It is not common. I mean, I hardly ever see
- 23 trauma to the hymen. Again, like only five percent do you
- 24 see the trauma.
- Q. Ma'am, have a seat.

- 1 Are you familiar with cases where there is
- 2 known penetration and yet no medical findings?
- 3 A. Correct. I've had several cases where actually
- 4 the physical abuse was witnessed contact, and the exams
- 5 have been completely normal.
- 6 Q. Are you familiar with a pregnancy study that
- 7 referenced -- where pregnant girls were examined?
- 8 A. Right. You mean the study with the 37 girls.
- 9 Q. Yes, ma'am.
- 10 A. Okay. Yes. They did a study, so all of the
- 11 girls had been sexually -- or had had sexual intercourse
- 12 and/or pregnancy, and --
- MR. GREEN: Objection, your Honor, as to
- 14 the -- we don't have foundation for this study to be
- 15 entered.
- 16 THE COURT: Well, the objection is
- 17 sustained.
- 18 Get back on course. Ask another question.
- 19 BY MR. LONG:
- 20 Q. Sure.
- So based on your training and experience,
- 22 penetration does not result in a medical finding; is that
- 23 accurate?
- A. That's correct. I've been in family practice for
- 25 some time, and even with the pregnant females that come in

- 1 for their prenatal care, hymen is completely normal.
- Q. Are you familiar with colposcope, the colposcope
- 3 instrument?
- 4 A. Yes.
- 5 Q. Tell us what that is?
- 6 A. The colposcope is an instrument that we often use
- 7 for sexual abuse. It has the ability to illuminate or
- 8 light up specifically the genital area and magnify what
- 9 you are looking at.
- 10 Q. And is that a common tool that's used in the
- 11 sexual assault examination?
- 12 A. Yes.
- 13 Q. Now, you're here obviously to testify in a case.
- 14 Did you personally examine a patient in this case?
- 15 A. No.
- 16 Q. What did you do?
- 17 A. I was asked to review some photos of a girl that
- 18 had -- that had allegations of sexual abuse, and then
- 19 review some of the documentation that went along with
- 20 that.
- Q. Okay. The photos that were -- that you reviewed,
- 22 were these colposcope pictures?
- 23 A. Yes.
- Q. Now, when you were given the colposcope pictures
- 25 to view, approximately how many photos did that entail?

- 1 A. Four. Four pictures.
- Q. When you were given those -- those photos to
- 3 examine, were you given any other information?
- 4 A. Initially, no.
- 5 Q. So when you first looked at those photographs,
- 6 you had no additional information; is that accurate?
- 7 A. That's correct.
- 8 Q. At some point did you?
- 9 A. Yes.
- 10 Q. But initially you did not?
- 11 A. Correct.
- 12 Q. Tell us, if you would, what you observed in those
- 13 colposcope pictures without any other information?
- 14 A. Okay. What I observed is that I could tell that
- 15 the child had application of toluidine blue, which is a
- 16 dye that is often applied to the genital area in females
- 17 or males that have been sexually abused.
- 18 The reason they put that dye on there is to
- 19 see if there is any kind of microtrauma that you couldn't
- 20 see with just the normal eye. So they put the dye on
- 21 there, then they use KY Jelly with a gauze, and they take
- 22 the dye off. If there is what we call uptake or if the
- 23 skin still stays blue because the dye is blue itself, then
- 24 we can actually see the site that's injured because it's
- 25 blue. And according to the extent of the injury you can

- 1 tell, you know, how deep it is, how wide it is, how large
- 2 it is.
- 3 So what happens with the dye itself, when
- 4 the upper layers of the skin, the epithelial tissue, when
- 5 they are removed, scratched off, cut off, rubbed off, the
- 6 cells underneath will uptake that dye. So the other
- 7 surrounding cells where the skin is normal, it will be
- 8 normal, so you can see actually the injury.
- 9 So in this particular -- the first photo was
- 10 just the external genitalia. I could not see inside
- 11 closely with the hymen and so forth. The second photo it
- 12 did show an area of toluidine blue uptake. It looked like
- 13 an abrasion with a deeper injury in the middle of the area
- 14 that I was looking at. The third photo did show the hymen
- 15 and more of an area that it covered. And the abrasion did
- 16 extend over a little bit more to the left side below the
- 17 labia, left labia minora.
- 18 Q. In just looking at these photos, did you start to
- 19 form an opinion?
- 20 A. Yes.
- 21 Q. Tell us about that.
- 22 A. Again, I was looking at photos, which is like two
- 23 dimensional, not three, so it appeared to me that, yes, it
- 24 was an abrasion. And it looks like to me because of the
- 25 deeper blue in the middle like there was a possible deeper

- 1 abrasion or laceration there in the midline, so it did --
- 2 you know, when you have that uptake of the dye, it's
- 3 indicative of trauma to the skin.
- 4 Q. Were you able to draw a conclusion as to whether
- 5 or not this injury was bleeding at any point?
- A. I did not see any bleeding in the pictures, but I
- 7 did also see a picture of the underwear which had appeared
- 8 to be a small blood stain in the underwear.
- 9 Q. And this injury that you observed is -- would you
- 10 expect for that injury to leave that type of a blood
- 11 stain?
- 12 A. Right. We typically right away, acutely, less
- 13 than 48 hours, when you have an abrasion like that, that
- 14 genital area is very vascular, so it could be considered
- 15 superficial, but yet it was still significant enough that
- 16 it did bleed.
- 17 Q. Approximately -- talk about just the shape of the
- 18 injury that you observed?
- 19 A. The injury was -- remembering the diagram, it was
- 20 right -- if you're thinking about the hymen like a clock
- 21 face, 12:00 o'clock is up here, 6:00 o'clock down here,
- 22 the abrasion was below that area at 6:00 o'clock. It
- 23 appeared to me in the pictures, probably about a
- 24 centimeter wide by a centimeter long, more so over to the
- 25 left part of the patient's body, and it was darker in the

- 1 middle looking like it was deeper --
- 2 Q. I'm going to ask you --
- 3 A. -- as far as the injury.
- 4 Q. Would the diagram assist you in showing where it
- 5 is you observed it?
- 6 A. Yes.
- 7 Q. I'm going to ask you to stand again, and I'll
- 8 show Exhibit No. 101.
- 9 THE COURT: Yes, you may.
- MR. LONG: With the court's permission.
- 11 BY THE WITNESS:
- 12 A. So the injury, it came down like this, and then
- 13 it went over here to the left a little bit and then came
- 14 back up. So this whole area here was involved.
- 15 BY MR. LONG:
- Q. And the area that you observed, was that inside
- 17 the vulva?
- 18 A. Yes. Because when you put like a small child in
- 19 what we call a frog-leg position when her knees are up and
- 20 her feet together, without putting any traction on, what
- 21 we do when we do the exam is we gently take ahold of the
- 22 outside lips, we'll pull them apart slightly and pull it
- 23 towards us. What that does is it opens up so we can see
- 24 that hymen because we're looking for injuries inside.
- Before we put any traction or take ahold, I

- 1 can't see this, you know, because it's covered by the
- 2 outside lips. So in order to see it, I would still have
- 3 to put traction. So it's well protected, but it is still
- 4 considered external because it is not into the vagina.
- 5 Q. Okay. You said it's external because it is not
- 6 in the vagina, but is the injury you saw inside the vulva?
- 7 A. Yes. It is inside the vulva because remember,
- 8 you've got the outside lips, then the inside lips, then
- 9 it's right in here next to the hymen, which is inside the
- 10 vulva.
- 11 Q. So in order to have gotten that injury, someone
- 12 or something would have had to penetrate the vulva; is
- 13 that accurate?
- 14 A. Yes, that's accurate.
- 15 Q. Now, if someone was to describe the injury on the
- 16 labia minora, would you understand why someone would draw
- 17 that conclusion?
- 18 A. Yes.
- 19 Q. Explain that, please?
- A. Well, again, the labia minora are the inside
- 21 lips, and they typically come all the way down on your
- 22 adult female. But if you're looking at the injury and
- 23 it's coming over more to the left side, as far as
- 24 describing terminology, I could see somebody else calling
- 25 this more the labia minora, which really typically

- 1 wouldn't be inaccurate. It's just a difference in the
- 2 anatomy from a child to a female adult.
- 3 Q. Okay. So even a medical professional that would
- 4 refer the injury to that side of the labia minora would be
- 5 consistent with what you observed, accurate?
- 6 A. Yes.
- 7 Q. Have a seat, please.
- Now, based on what you observed -- well, so
- 9 you saw the photos, correct?
- 10 A. I did.
- 11 Q. And what you testified to is some of the things
- 12 that you were able to -- conclusions you were able to draw
- 13 based on those observations, without any other
- 14 information, did you have an idea as to what could have
- 15 caused this injury?
- 16 A. Yes. Some type of trauma to that particular area
- 17 itself, whether it's some type of blunt force trauma that
- 18 caused that injury, whether it is some type of rubbing,
- 19 scratching of that area because I could see the upper
- 20 layer was gone.
- 21 Q. And what you were seeing there, is that
- 22 consistent with a finger?
- 23 A. Yes, that would be.
- Q. And based on your training and experience and the
- 25 common places where sexual abuse is, is this consistent

- 1 with sexual abuse?
- 2 A. Yes.
- 3 Q. And what factors did you look at in drawing that
- 4 conclusion?
- 5 A. The location of the injury and also the use of
- 6 the toluidine blue, you know, lighting up the area itself
- 7 because that area is pretty well protected, you know, by
- 8 the outside lips, so you have to get pretty -- pretty
- 9 specific and focal to injure that specific area of the
- 10 body.
- 11 Q. And again, this area of the body generally is --
- 12 I think you described, is it fairly protected?
- 13 A. It is.
- Q. And so if a four-year-old child is playing,
- 15 running, walking, riding a bike, is it, again, fairly
- 16 protected?
- 17 A. Right, it is.
- 18 Q. Would you expect a fall to cause this -- this
- 19 injury with no other injuries?
- 20 A. We do see quite a few straddle injuries at Child
- 21 Help, but most -- most cases of straddle injury -- first
- 22 of all, you always have to start with the history. Well,
- 23 what happened, you know, what did your child say. In this
- 24 case, you know, the child is four, almost five, so she's
- 25 verbal enough to tell you.

- Also in assessing straddle injuries, we look
- 2 at was there a witness to the injury itself. And then
- 3 third, we look at the location.
- With straddle injuries, typically they tend
- 5 to be on one side or the other, and they typically tend to
- 6 be more on the anterior surface, meaning the outside lips,
- 7 and more to the inside of the groin area. Now, we have
- 8 seen straddle injuries that have occurred midline, but
- 9 there is usually a very good history that goes along with
- 10 that, that the child impaled himself or herself onto an
- 11 object. That would, you know, make sense with an injury
- 12 that we're seeing.
- 13 Q. I'd like to talk to you about the possibility of
- 14 a barbed wire causing this injury. Did you ever view a
- 15 photo that showed a barbed wire injury?
- 16 A. Yes. And I've also cut myself on barbed wire.
- Q. Okay. Is what you're seeing, what you saw in the
- 18 photos, consistent with a barbed wire injury?
- 19 A. In my opinion, no.
- Q. Would it be reasonable to conclude that a barbed
- 21 wire caused this injury?
- 22 A. No.
- Q. Would it be reasonable to conclude that a -- that
- 24 straddling -- a straddle injury caused this injury?
- 25 A. No.

- 1 Q. Now, as a medical professional, as a family nurse
- 2 practitioner, is it best practices to only look at photos?
- 3 A. No.
- 4 Q. What other things would assist you in making a
- 5 diagnosis or rendering an opinion?
- 6 A. Well, I would -- I would absolutely want to know
- 7 what the child said. And in this case, you know, she's
- 8 old enough to have a forensic interview. She's old enough
- 9 to tell her parents and/or the doctor or the police what
- 10 happened, how did she -- how she did sustain this injury.
- 11 And also, I'd want to look at any kind of medical notes
- 12 that were -- that go along with the actual pictures.
- 13 Q. Okay. And did you request to review those?
- 14 A. I did.
- 15 Q. Did you get a chance to review those?
- 16 A. I did.
- 17 Q. And what did you look at?
- 18 A. I did review the notes from Dr. Klein from Tucson
- 19 Medical Center, and she did indicate about the abrasion in
- 20 the particular area down here on -- more towards the left
- 21 side of the labia, below the labia minora, as she
- 22 described. She also indicated in her notes that the girl
- 23 had disclosed about the alleged perpetrator putting his
- 24 fingers inside and scratching her.
- Now, on the sexual assault examination kit

- 1 or report that was done by the SANE nurse, she also
- 2 indicated during her exam that she took a Q-tip, and she
- 3 was touching different parts of the little girl's
- 4 genitalia and asking her where she was touched. And she
- 5 did indicate that she was touched where the injury was
- 6 located.
- 7 Q. Does this information assist you in offering an
- 8 opinion?
- 9 A. Yes, because the history is consistent with the
- 10 injury that I reviewed.
- 11 Q. Okay. So if I'm correct, in looking at the
- 12 colposcopes only, the injury itself did provide you some
- 13 information, correct?
- 14 A. Yes.
- Q. And you testified earlier what you saw you
- 16 believe was consistent with sexual abuse, correct?
- 17 A. Right.
- 18 Q. And that was without the report?
- 19 A. Correct.
- Q. But that the reports now, based on the history
- 21 and the other information, confirmed some of the
- 22 conclusions that you had drawn in only looking at the
- 23 photos, correct?
- A. Right. The other part of that is, you know,
- 25 there was nothing in the medical history from the mother

- 1 that was noted in the report indicating any type of
- 2 medical or reasons, causes, why she would have an abrasion
- 3 in that genital area. There was no history of any
- 4 scratching or urinary tract infection or anything else to
- 5 provide reason why she would have that finding.
- 6 Q. Let me talk about this, is there -- are there
- 7 some medical conditions that could explain an injury such
- 8 as this?
- 9 A. Sure. Sometimes you can have infections,
- 10 discharge in the genital area that can irritate the skin
- 11 and, you know, cause the skin to slough off and become
- 12 irritated. Also, some type of tight clothing or rubbing
- 13 or something could also, you know, remove the upper
- 14 layers, so, you know, an irritation, infection, and/or
- 15 trauma can cause an injury.
- Q. Are there other things that you would expect to
- 17 see if it was this type of a medical condition you
- 18 described?
- 19 A. Yes. I would expect that there would be a
- 20 medical history to go along to explain why I'm seeing what
- 21 I'm seeing, to explain that finding, or, you know,
- 22 something else as far as the clothing, some kind of
- 23 description. The underwear was very tight or, you know,
- 24 too small or something, which there was no note of that.
- 25 In fact, the underwear was brand new, if I remember right.

- 1 Q. Talk about again this medical condition, are
- 2 there other -- would you expect to see an injury in other
- 3 parts of the body as well or some symptoms?
- A. Right. You know, there are other medical
- 5 conditions that can cause the upper layers of the skin to
- 6 slough off or become irritated, but you usually see other
- 7 findings associated with that and a history to go along to
- 8 support that.
- 9 Q. Okay. So in this case, with all the factors
- 10 taken into consideration, is it reasonable to conclude
- 11 that this injury was caused by another medical
- 12 explanation?
- 13 A. By another medical explanation?
- 14 Q. By a medical condition or illness that you just
- 15 described?
- 16 A. No. My conclusion that it was, you know, caused
- 17 from trauma.
- 18 Q. Are you familiar with instances of -- could you
- 19 talk about children touching their own bodies?
- 20 A. Sure. Children, especially around the age of
- 21 five or six, four, five, six, even younger, it's not
- 22 uncommon for them to touch their genitals or masturbate.
- 23 That's a common thing that happens in young children. But
- 24 typically when children are touching themselves, they are
- 25 not touching themselves enough to cause injury. It's

- 1 usually a self-soothing behavior or it feels good, so we
- 2 typically don't see injuries from them just touching
- 3 themselves.
- Q. Okay. What about a child that was -- if they
- 5 were to demonstrate or show where someone else touched
- 6 them, would you expect that to leave an injury?
- 7 A. No.
- 8 Q. Why is that?
- 9 A. Well, because in my experience, and I've examined
- 10 thousands of the children with injuries, especially acute,
- 11 it's already sensitive and sore, so they are not going to
- 12 go jabbing and touching that area if it's already hurting.
- 13 So most of the time they are just, you know, pointing to
- 14 that area. But I've never, ever had a kid point to an
- 15 area to the point that they hurt themselves or that area.
- 16 Q. In this case did you have specific evidence to
- 17 indicate that the child would not have caused this type of
- 18 injury?
- 19 A. Well, I did note it on the -- the SANE report
- 20 because I'm always kind of curious with, you know,
- 21 abrasions and that or history of itching, scratching,
- 22 whatever. She indicated the child's nails were polished,
- 23 well-groomed, and they were very short, so it wasn't
- 24 consistent, you know, with long nails scratching.
- 25 Q. Is there anything about what you reviewed with

- 1 the photos, the report, anything that you reviewed that
- 2 would make this injury inconsistent with a finger
- 3 penetrating this little girl?
- 4 A. No, not that I can think of.
- 5 MR. LONG: Thank you.
- 6 THE COURT: Okay. Thank you, Mr. Long.
- 7 Mr. Green?
- 8 CROSS-EXAMINATION
- 9 BY MR. GREEN:
- 10 Q. When you first started testifying, you testified
- 11 that five out of a hundred something?
- 12 A. Children.
- 13 Q. Can you restate that for me?
- 14 A. Sure. Approximately five percent of the time --
- 15 well, like if we had a hundred children, only five out of
- 16 the hundred typically would have any injuries indicative
- 17 of sexual abuse. Most of the time there are no injuries.
- 18 Q. Now, this may be an obvious question, but if
- 19 there isn't any sexual abuse, are there injuries?
- 20 A. If there isn't any allegations of sexual abuse?
- 21 Q. If there is no allegation of sexual abuse or if
- 22 there is no sexual abuse, are there injuries?
- A. I've never really examined a child with no
- 24 allegations of sexual abuse. Now, there have been other
- 25 children examined by other physicians, and they note

- 1 uncommon findings, and they've been brought in with no
- 2 allegations of sexual abuse. And the majority of the time
- 3 it's related to other medical causes.
- 4 Q. Okay. But you wouldn't expect to find an injury
- 5 in someone who had not been sexually abused, who had no --
- 6 A. With no --
- 7 Q. With no trauma?
- 8 A. No disclosure of sexual abuse?
- 9 Q. Right.
- 10 A. Most of the time -- and it's what I told the
- 11 parents, when I'm interviewing them, I usually tell them
- 12 that most likely the exam is going to be normal. And I
- 13 give them the reasons why. But normal doesn't mean that
- 14 something didn't happen. The most important part of the
- 15 sexual abuse investigation is the interview, what the
- 16 child said.
- Q. Does normal mean that something did happen?
- 18 A. No, it doesn't.
- 19 Q. Are there any other causes other than a finger
- 20 that could have caused this injury?
- A. Well, it could have been done with, you know, an
- 22 object. You know, anything that's going to cause blunt
- 23 force trauma enough to erode those upper tissues or cause
- 24 that abrasion.
- 25 Q. So --

- 1 A. So --
- 2 Q. -- even though it's not consistent with
- 3 self-pleasuring or self-touching, it could have been
- 4 self-inflicted? There is a possibility that it could have
- 5 been self-inflicted?
- 6 A. It's possible.
- 7 Q. And even though it's not very likely, as you
- 8 stated that there was an injury, either a straddle injury
- 9 or some other form of blunt force trauma by an accident or
- 10 an injury of some sort, it is possible that that could
- 11 happen, correct?
- 12 A. It's possible.
- 13 Q. And this is an external part of the female
- 14 anatomy?
- 15 A. Correct.
- Q. So even though you stated that it's well
- 17 protected, it's still only about one layer deep, right?
- 18 A. Correct.
- 19 Q. And so some object could feasibly get in there
- 20 and cause that damage if she felt just the right way?
- 21 A. An object, yeah, finger, penis, any type of
- 22 object, uh-huh.
- 23 Q. Okay.
- 24 A. Yes.
- Q. Now, you said that generally there is medical

- 1 history that goes along with certain types of injuries
- 2 that are not associated with sexual abuse?
- 3 A. Certain type of medical conditions, yes.
- 4 Q. That could cause --
- 5 A. That are commonly thought to be abuse, yes.
- 6 Q. But that could be not abuse, but could have been
- 7 a medical condition that caused this type of an injury?
- 8 A. Correct.
- 9 Q. So if that medical condition was not reported,
- 10 there wouldn't be a medical history, correct?
- 11 A. Right.
- 12 Q. Or if that medical condition just happened or
- 13 just occurred recently and wasn't picked up by the
- 14 doctors, there wouldn't be a medical history either?
- 15 A. But there would -- you would have the observation
- 16 or the -- or the -- during your exam enough information if
- 17 you were going to say it was a medical cause to make that
- 18 determination.
- 19 Q. When you say blunt force trauma -- when I think
- 20 of blunt force trauma, I think of a baseball bat to the
- 21 head.
- 22 A. Right.
- Q. Is that a medical term, or is that a term of art
- 24 in the medical community?
- 25 A. Well, it's used as an explanation. And in this

- 1 case, with the abrasion, it's like microtrauma because
- 2 it's -- you know, you had to have some type of contact,
- 3 friction, injury enough to cause that disruption of the
- 4 skin and enough to cause bleeding, so something came in
- 5 contact with that particular part of the body enough to
- 6 cause injury.
- 7 Q. If an injury wasn't blunt force trauma, what
- 8 are -- what other classification would it be? Are there
- 9 other types of injuries other than blunt force trauma?
- 10 A. Well, sure. I mean, talking about physical
- 11 abuse, in general, there's other injuries.
- 12 Q. Well, I am not --
- 13 A. In the genital area?
- 14 Q. No, just in general injuries. I'm looking for an
- 15 understanding of that word, blunt force trauma?
- A. Well, that's what we commonly use in describing
- 17 sexual abuse as far as trauma to that -- to the genital
- 18 area.
- 19 Q. Okay. Is that a --
- 20 A. Just meaning that there's blunt force trauma
- 21 against those tissues. There has to be contact enough to
- 22 disrupt the skin enough to break the skin, so it's still
- 23 blunt force.
- Q. I'm sorry. We can't talk over each other.
- 25 A. I'm sorry.

- 1 Q. And I interrupted you, so I apologize.
- 2 It doesn't necessarily mean that it's like a
- 3 direct hit like this, it could be a slide or it could
- 4 be -- I mean; is that correct?
- 5 A. Well, I wasn't -- I wasn't there to know exactly
- 6 how it happened, but as far as, you know, causing an
- 7 injury, sure, you can have like glancing blows, or you can
- 8 have direct, but there still has to be contact, direct
- 9 contact.
- 10 Q. And all of those different types of contact would
- 11 be categorized as blunt force trauma; is that correct?
- 12 A. Yes, in describing it.
- 13 Q. All right. Thank you.
- 14 Did you -- based on the picture, were you
- 15 able to tell the size of the injury?
- A. Well, in the picture, it appeared to me to be
- 17 larger than what the SANE nurse described. Again, just
- 18 looking at it. But it was a two-dimensional picture. But
- 19 it looked, you know, about a centimeter by a centimeter in
- 20 diameter and length. But I know that she noted on her
- 21 notes that it was a little bit less than a half of a
- 22 centimeter. But again, your colposcope pictures are
- 23 enlarged.
- Q. Right. And so scale may be off if you're looking
- 25 at a picture as opposed to the actual?

- 1 A. Correct.
- 2 Q. In looking at the injury, is it possible that
- 3 that injury, however remote, is it possible that that
- 4 injury could be caused through the underwear without
- 5 damaging the underwear?
- 6 A. I did see the underwear. There was no kind of
- 7 tears or anything to the underwear.
- Q. That's not -- that's not my question.
- 9 My question is, is it possible for that
- 10 injury that you saw in the picture to have occurred
- 11 without going inside the underwear with a trauma, blunt
- 12 force trauma, that occurred through the underwear or that
- 13 was caused outside of the underwear?
- 14 A. Yes.
- MR. GREEN: Thank you. No more questions,
- 16 your Honor.
- 17 THE COURT: All right. Mr. Long, any
- 18 redirect?
- MR. LONG: Yes, your Honor.
- 20 REDIRECT EXAMINATION
- 21 BY MR. LONG.
- Q. Ms. Hess, is there any -- there were some words
- 23 that were used. Possible?
- 24 A. Uh-huh.
- Q. Are certain things possible, however remote?

- 1 A. Right.
- Q. Was there any evidence of those other
- 3 possibilities?
- 4 A. No. There was no mention of any straddle injury
- 5 or other injuries, like I said, or medical reasons or
- 6 history of scratching or infections or anything like that
- 7 to make me question other possible causes or explanation
- 8 for the injury.
- 9 Q. And as a scientist, will you ever say that -- is
- 10 it difficult to say that there are not possibilities that
- 11 are out there?
- 12 A. That's correct.
- 13 Q. Explain that?
- A. Well, you can't say, you know, a hundred percent
- 15 that it was -- I mean, that there is not another
- 16 possibility. There's always -- it's possible that
- 17 something else could have happened like -- again, because
- 18 I wasn't there, but looking at the history, the
- 19 disclosure, and the evidence that I see, that's the most
- 20 likely reasonable explanation for the injury.
- Q. Okay. The most likely reasonable explanation,
- 22 and that is a finger?
- 23 A. Correct.
- Q. Consistent with the disclosure, correct?
- 25 A. Very consistent, yes.

- 1 Q. Again, you were asked questions about the
- 2 underwear and whether it's possible that this type of
- 3 injury could somehow go through the injury or -- I'm sorry
- 4 -- go through the underwear, the cloth of the underwear,
- 5 and cause this injury. And you said, sure, you suppose
- 6 it's possible, is that --
- 7 A. Well, right. I mean, you know, you could still
- 8 take some type of an object, whether it's a finger or
- 9 something else, and put it or place it against the
- 10 underwear, push against the underwear into the genital
- 11 area and still cause injury.
- 12 Q. Okay. But is it reasonable to conclude that
- 13 that's what happened?
- 14 A. No. I mean, you've got the history is that it
- 15 was -- she said he took her panties off and he put his
- 16 fingers inside and scratched, so I mean, that's very
- 17 consistent with the injury.
- 18 Q. And again, of all possibilities that Mr. Green
- 19 suggested that you -- you conceded are -- might be
- 20 possible, is there any evidence of those?
- 21 A. No evidence.
- Q. So one would have to guess about a fact in order
- 23 to conclude that; is that accurate?
- A. That's accurate.
- MR. LONG: Thank you, ma'am.

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THE COURT: Okay. Mr. Long, may this
1
2
   witness be excused?
3
                 MR. LONG: Yes, your Honor.
                 THE COURT: Mr. Green?
4
                 MR. GREEN: Yes, your Honor.
5
6
                 THE COURT: Thank you very much, ma'am.
   need to tell you before you leave, the Rule was invoked,
7
   so you can't talk to anybody else involved in the trial
8
   except the attorneys until we're done.
9
10
                  THE WITNESS: Okay.
                  THE COURT: Thank you. You can't talk about
11
12
   the case, otherwise you can talk all you want. Sorry.
13
                 (Witness excused.)
14
                 THE COURT: Mr. Long, that's it?
15
                 MR. LONG: I have no more witnesses for
16
   today.
17
                  THE COURT: Other than the -- well, we have
18
   the witness coming Monday, and we already discussed that
19
   with the jury, right?
20
                 MR. LONG: Correct.
21
                 THE COURT: Okay. And you agree, Mr. Green?
22
                 MR. GREEN: Yes, your Honor.
23
                 THE COURT: Well, ladies and gentlemen, as I
   told you this morning, we're going to recess, and we're
24
```

actually not going to start again until Monday. Please be

25

- 1 in that jury assembly room by quarter to 9:00 on Monday.
- 2 And once again, we'll do our absolute best to get you up
- 3 here by 9:00 o'clock in the morning.
- 4 Now that you have a long weekend and you've
- 5 heard a lot of testimony, there's probably even more
- 6 pressure from family and friends to talk about it. Please
- 7 don't. Please remember that admonition. Please don't
- 8 discuss it with anybody. This case will be given to you
- 9 soon enough for your deliberations, and then you'll get to
- 10 talk all you want.
- Okay. I see a hand. Yes, ma'am.
- 12 A JUROR: I just want to know for employment
- 13 purposes, do we think the trial will go longer into
- 14 Wednesday, or are we still looking at finishing on
- 15 Tuesday?
- 16 THE COURT: As I told you in voir dire, I
- 17 really think we'll be able to give it to you Monday, but
- 18 even if we can't, we know we'll be done by Tuesday at the
- 19 latest. If we are not, I'm -- never mind. We should be.
- 20 There shouldn't be any problem at all. I haven't heard
- 21 any differently from the attorneys, talking about the
- 22 potential witnesses. I don't think that's changed at all.
- Okay. Again, anything else further?
- MR. LONG: No, your Honor.
- THE COURT: Sir?

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1
                  MR. GREEN:
                             No, your Honor.
 2
                  THE COURT: And another sir?
 3
                  MR. KOHLER: No, your Honor.
 4
                  THE COURT: Thank you. Enjoy the long
    weekend, folks. I'll see you Monday.
 5
 6
                  (The following proceedings were had outside
 7
    the hearing and presence of the jury.)
 8
                  MR. LONG: Judge, just want to get the court
    and Mr. Green's permission -- I suppose I may not need Mr.
 9
10
    Green's permission, but Mr. Kohler may not be available
11
   next week. The only thing that potentially impacts is if
   we need rebuttal witnesses that he examined, asking the
12
   court's permission to allow me to do that. I don't think
13
   that's an issue legally or otherwise. It only pertains to
14
   the specific direct and then rebuttal or objections, but
15
16
   just want to bring that to the court's attention, Mr.
   Green's attention, so no potential issues regarding that.
17
18
                  THE COURT: Mr. Green can object, and I'll
19
   be happy to rule on it. Don't worry about it.
20
                  What else?
                             Mr. Green?
21
                 MR. GREEN: No objection, your Honor.
22
                 THE COURT: Attorneys, anything else?
23
                 MR. LONG: No, sir.
24
                 THE COURT: Okay. Thank you very much.
```

I do want to tell you, I ended up agreeing

25

```
1 to start another trial on Tuesday. It can be delayed if
 2
    this one happens to spill over. Okay. Hopefully we
 3
    won't.
 4
                  MR. LONG: I hope it'll just be a matter of
   taking a verdict, at the latest.
 5
 6
                  THE COURT: There's decisions that have to
 7
    be made on that side of the room.
 8
                  MR. LONG: Even with those decisions, I
 9
   think.
10
                  THE COURT: You never know. See you all on
11
    Monday morning. Thank you.
12
                  (The proceedings were adjourned.)
13
14
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5	<u>C E R T I F I C A T E</u>
6	
7	I, MICHELLE L. WELLNER, CR, RPR, do hereby
8	certify that the foregoing pages constitute a full, true,
9	and accurate transcript of the proceedings had in the
10	foregoing matter, all done to the best of my skill and
11	ability.
12	WITNESS my hand this 26th day of February,
13	2014.
14	michelle L. Wellner
15	MICHELLE L. WELLNER, CR, RPR Certified Reporter #50742
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